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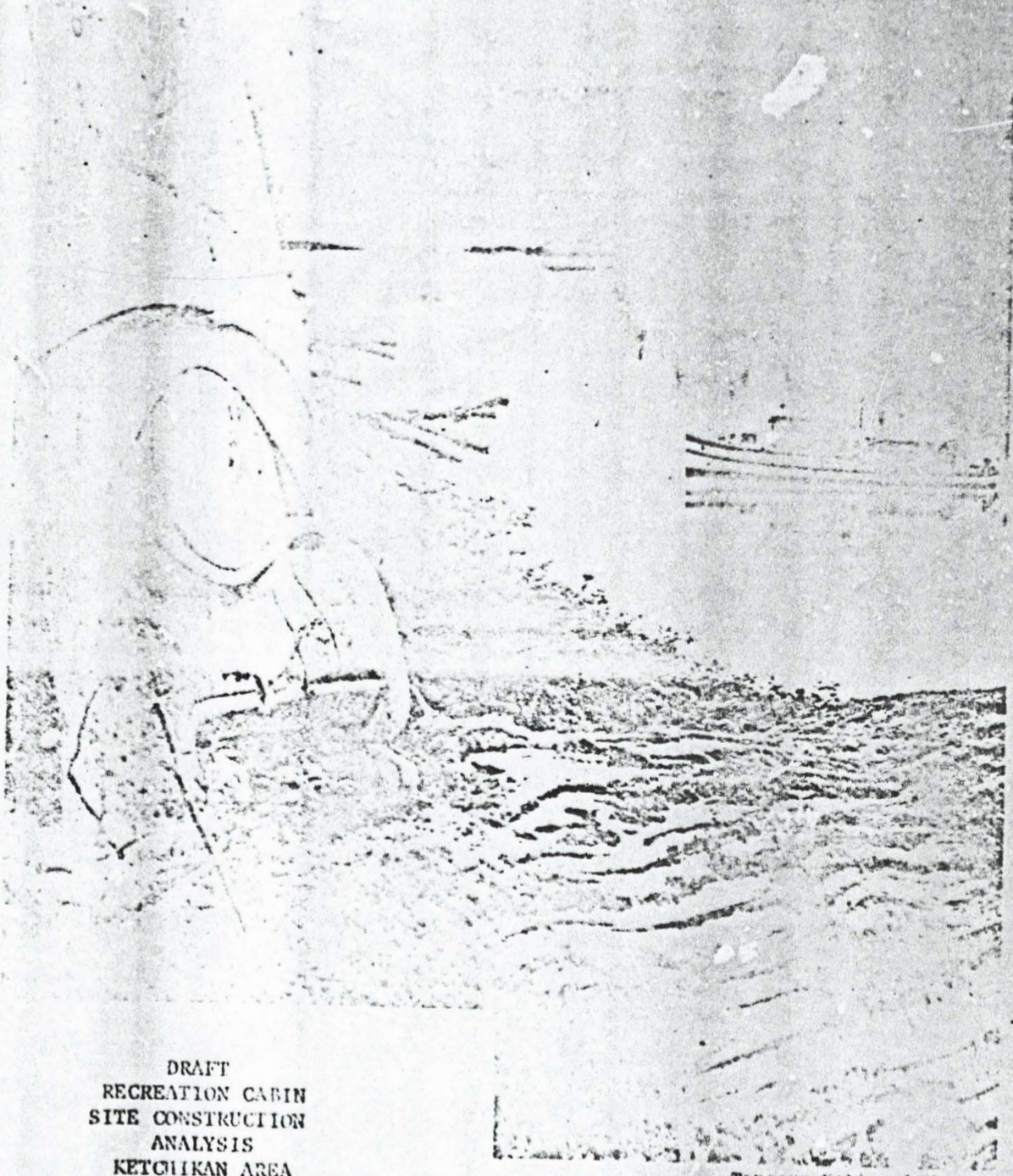

Tongass National Forest

DRAFT
RECREATION CABIN SITE CONSTRUCTION ANALYSIS
KETCHIKAN AREA

FEBRUARY 1981

J. RUOPP
RECREATION SHORT COURSE PROJECT
CLEMSON UNIVERSITY

RUOPP

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I. INTRODUCTION

The Alaska Region maintains a system of public use recreation cabins on a reservation system. The cabin program was first developed to provide visitors a means of using the forest's fish and wildlife resources. The cabins were provided because the often harsh Alaskan environment made a sound shelter necessary and it was difficult to transport suitable camping gear.

The cabin program began in the 1930's when an extensive system of puncheon trails and three sided, shaked, Adirondach shelters were constructed with the Civilian Conservation Corps providing labor. During the 1950's through a cooperative effort between the Forest Service and the Fish and Wildlife Service, additional plywood sided cabins were added to the system. The purpose was to encourage the shift of sportsmen from lakes receiving heavy fishing use to those that received little or no pressure. Dingle-Johnson funds, a tax on sporting goods, were used for this program.

Since the beginning, the system has exparded throughout the Region. It is no longer primarily designed as a means to allow harvest of fish and game although fishing and hunting remains popular activities with cabin users. The cabin program has taken on a much broader application which accommodates a great variety of recreation visitors.

The main purpose of the cabin system today is generally considered to be the safeguarding of visitors, protection of resources, and the enhancement of the recreation experience. Maintenance costs are covered in part by Granger-Thye Act money. The fee collected for cabin reservations can be used only for maintenance and is actually a maintenance agreement between the Forest Service and the person using the cabin. Refer to Appendix for sample agreement.

The most common reason people visit a cabin is for general recreation, camping, and enjoying the forest environment. Other popular activities include hunting, fishing, backpacking, skiing, viewing scenery, and general relaxation.

The use of fish and wildlife is still a major activity with cabin users, and since the State of Alaska manages the fish and game, close coordination is required in the management of the cabin program. The cabins continue to provide a means of distributing hunting and fishing pressure by encouraging use of backcountry areas where fish and game populations are sufficient to support harvest.

The recreation cabins are a major safety feature in remote areas of the forest. State and Federal agency personnel, commercial fishermen, and the general public take refuge in cabins during severe storms or when an emergency occurs. This is a major concern where no roads exist to assist in emergency operations and aircraft operation is often restricted due to weather. It is especially true in regards to the recreation cabins located on saltwater and easily accessible to the commercial fisherman and recreational boater. The cabin is often the difference between an unscheduled delay and a much more serious situation. Data does not exist to calculate the amount of this type of use since those using the cabin under this type of situation would not register, but it is believed that this type of use is significant.

Another very real administrative consideration is fewer trespass cabins are constructed in these highly isolated areas if recreation cabins are already available. The severe climate and ever present likelihood of hypothermia demands shelter.

The cabin system is one of the most popular recreation attractions in Alaska. It has received publicity in Alaska Magazine as being the best recreation opportunity available for the money. In a recent newspaper article, over 90 percent of the public favored cabin development on Federal lands. This was significantly higher support than for other types of development including other types of recreation.

II. SCOPE

A similar cabin study was completed for the Chugach National Forest, South Central Alaska, in 1979. The Anchorage Forest Supervisor's office is approximately 700 airmiles from Ketchikan, Alaska.

The Ketchikan Forest Supervisor's office is one of three administrative units located within the Tongass National Forest in Southeast Alaska. It is the southernmost area, commonly referred to as the Gateway to Alaska, and encompasses 17,005,388 acres net. Four Ranger Districts and the 2,136,000-acre Misty Fjords National Monument are under the jurisdiction of the Ketchikan Forest Supervisor.

Currently, there are 143 public recreation cabins located within the Chatham, Stikine, and Ketchikan administrative units of the Tongass National Forest. Thirty-six cabins are found on the Chugach National Forest. This study will only deal with the existing cabin situation and projected needs within the 7.2 million acre Ketchikan Area. It could serve as a building block in completing a cabin plan for the entire Tongass National Forest at a later date just as the Chugach plan has served as a strong guide for this plan.

III. OBJECTIVES

The primary objective of this cabin plan is to provide direction for future development of the cabin system. It will also supply information for the on-going individual Management Area Analysis and Tongass Land Use Management Plan (TLUMP) upon its impending modification to reflect the land use designations and other changes prescribed by the December 2, 1980 Alaska National Interest Lands Conservation Act (commonly expressed as the Alaska Lands Act). It is assumed that a priority will be placed on completing a recreation opportunity spectrum inventory (ROS), regionwide, in the near future. Information collected for the cabin plan will also be available for the ROS.

IV. PHYSICAL SETTING

Figure 1 shows the relationship of the Ketchikan Administrative Management Area (hereafter referred to as the Ketchikan Area) to the State of Alaska. The Forest is roughly divided into two major areas: (1) the mainland and Revillagigedo (Revilla) Island and its associated smaller islands (fig. 2), and (2) Prince of Wales Island and the off-shore or western islands (fig. 3).

The area is characterized by steep glaciated and snow-capped mountains with deep penetrating fiords on the mainland and completely glaciated islands off-shore. Elevations range from sealevel to about 4,000 feet with perpetual snow patches on the higher mountains.

The Ketchikan Area together with the remainder of Southeast Alaska is in the humid maritime zone. Rainfall is high, averaging over 100 inches per year at sealevel. Cloudiness is the rule. Percentage of possible sunshine throughout the year as recorded at Annette Island near Ketchikan is 27 percent. Strong winds are frequent, especially from mid-September to mid-May but can occur in any month. More than 80 percent of the total yearly precipitation falls during these months. Average air temperature at Hollis, Prince of Wales Island due west of Ketchikan, during the growing season is below 55 degrees Farinheit.

Thus, the climate is mild with cool temperatures, high humidity, and high precipitation. In winter, snowfall is generally light along the beaches, but a deep snowpack accumulates inland at higher elevations (excerpt from LPK Timber Sale Plan for 1979-84).

V. LEGISLATIVE HISTORY

Until recently, approximatey 95 percent of the land within the forest boundaries was National Forest System land. Three important pieces of legislation have changed this land ownership pattern.

The 1958 Alaska Statehood Act allowed the State to select up to 400,000 acres of National Forest lands from both the Chugach and Tongass Forests. A large State selection in December 1977 resulted in 49,212 acres of relatively undeveloped and isolated National Forest lands in the Ketchikan Area being transferred to the State plus additional acreage from the other Areas.

Passage of the Alaska Native Claims Settlement Act (ANSCA), in 1971, granted 23,040 acres to each Native village and a like amount of acreage to the Regional Corporations. Seven Native corporations and Sealaska Regional Corporation have made selections in the Ketchikan Area for an approximate amount of 315,000 acres. Both the State and ANSCA lands are still being processed.

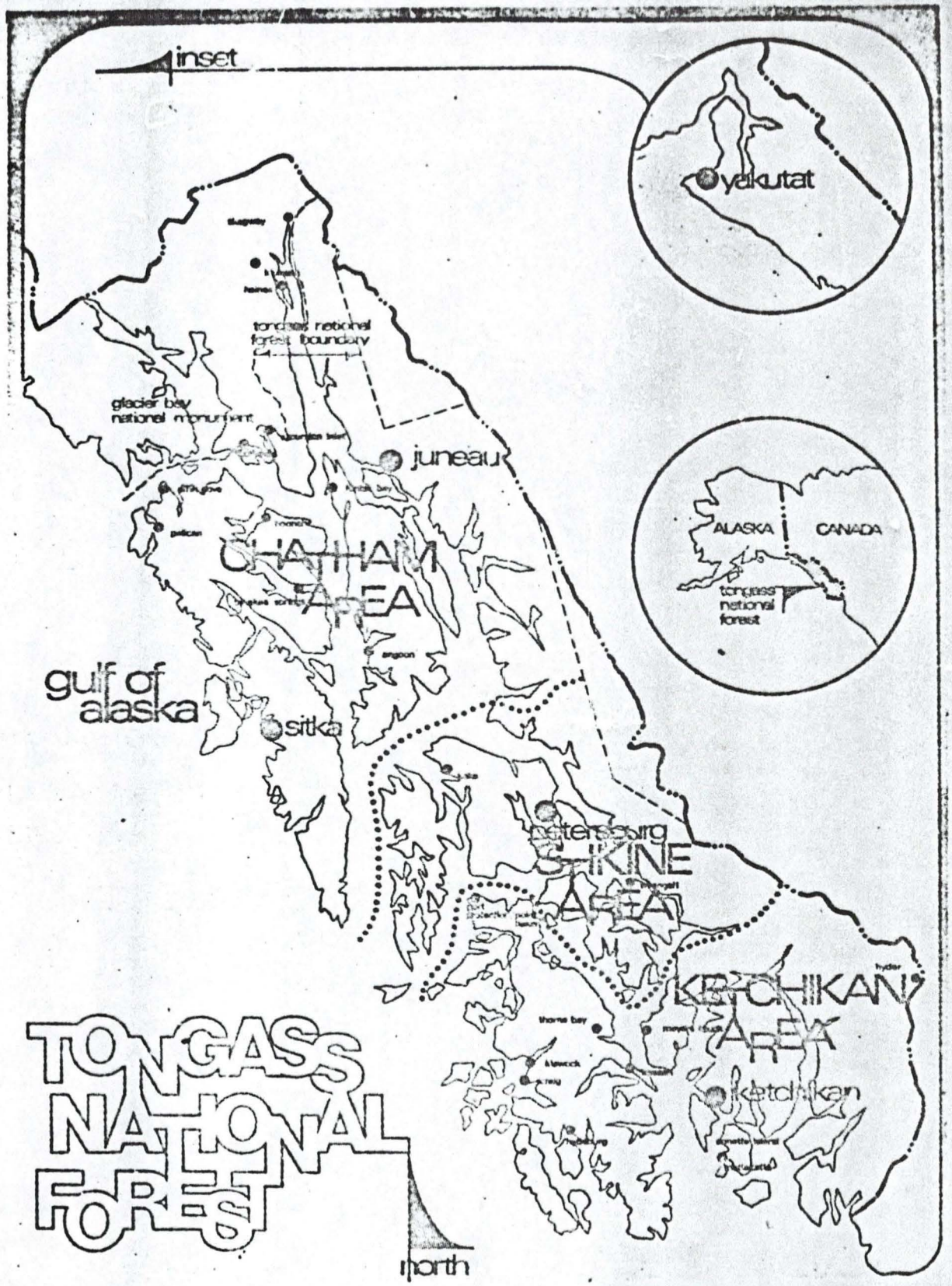

inset
yakutat
tongass national forest boundary
glacier bay national monument
juneau
CHATHAM AREA
gulf of alaska
sitka
petersburg
STIKINE AREA
KETCHIKAN AREA
ketchikan
ALASKA
CANADA
tongass national forest
TONGASS NATIONAL FOREST
north

FIGURE 1

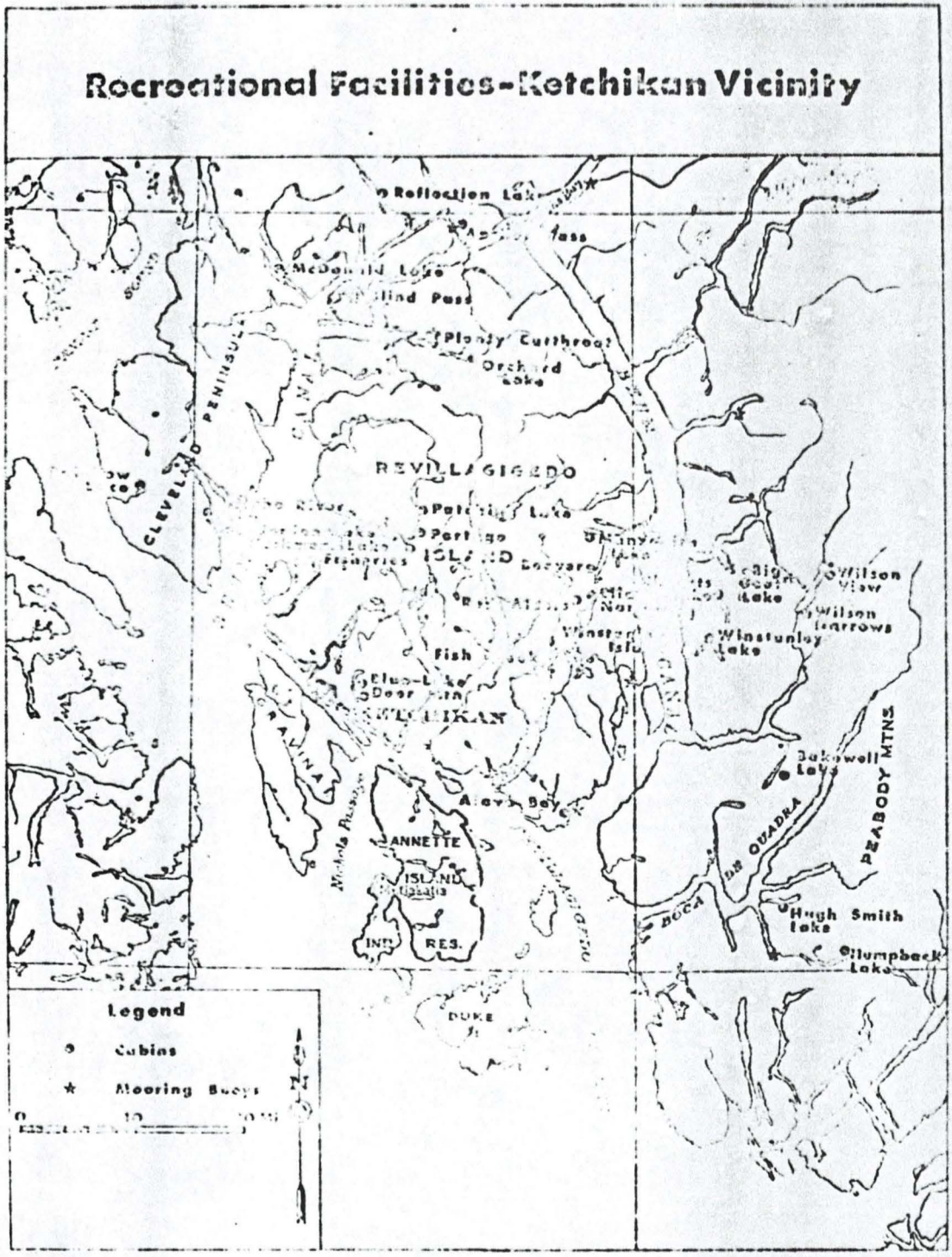

Recreational Facilities-Ketchikan Vicinity
Reflection Lake
McDonald Lake
Blind Pass
Ploaty Cutthroat
Orchard Lake
CLEVELAND PENINSULA
REVILLAGIGEDO
Patching Lake
Portage Lake
Fisheries
Fish
Deer
KETCHIKAN
Winstunley Island
Winstunley Lake
Wilson Narrows
Wilson View
Bakewell Lake
PEABODY MTNS
DE QUADRA
BOCA
Hugh Smith Lake
Humpback Lake
Alava Bay
ANNETTE ISLAND
INT.
RES.
DUKE
Legend
Cabins
Mooring Buoys

FIGURE 2

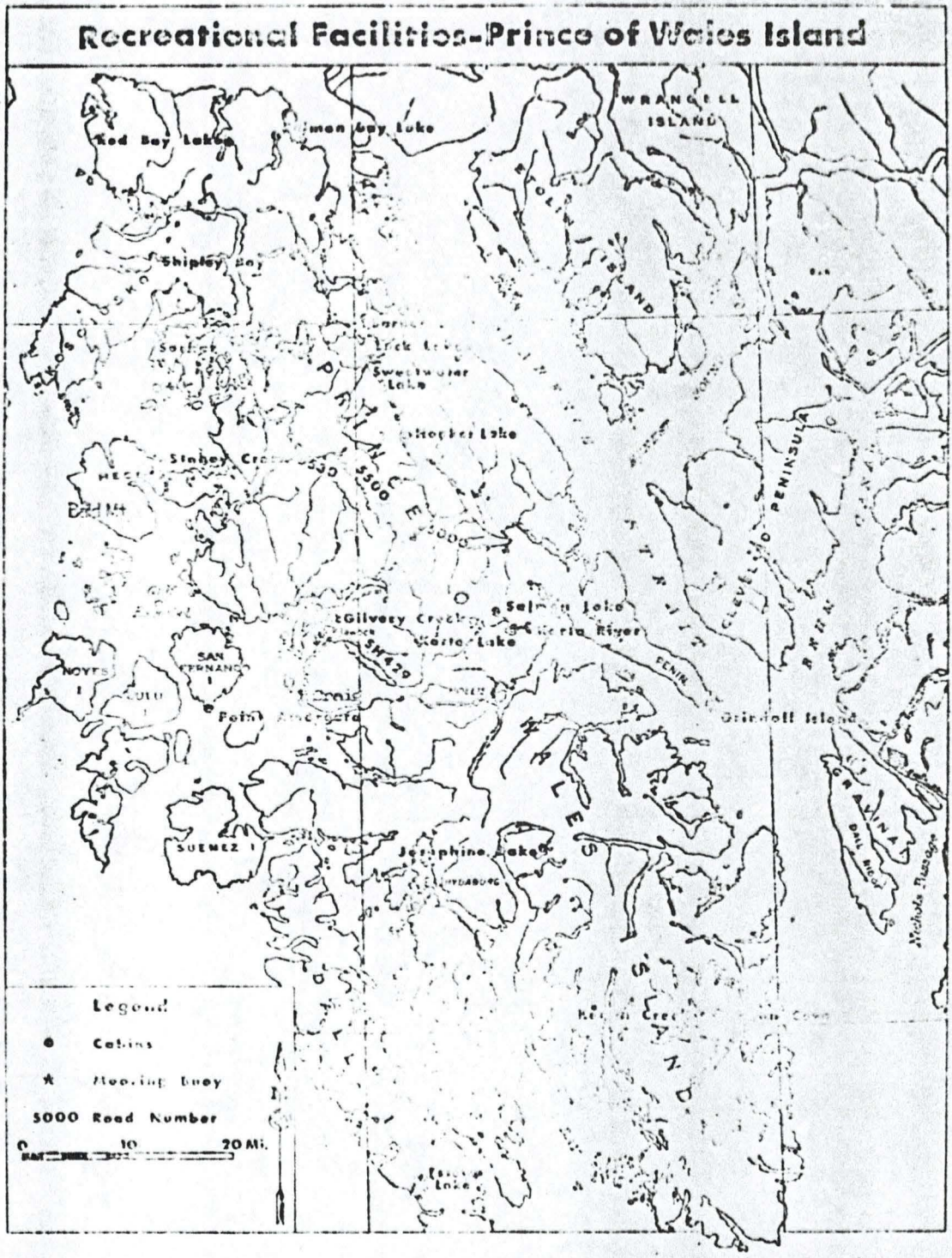

Recreational Facilities-Prince of Wales Island
WRANGELL ISLAND
Red Bay Lake
Shipley Bay
Sweetwater Lake
Thorsheim Lake
Stanley Creek
PRINCE OF WALES ISLAND
Gilvesy Creek
Salmon Lake
Karta River
Karta Lake
SM 470
SAN FERNANDO I
Point Amargura
Grindall Island
CLEVELAND PENINSULA
SUEMEZ I
Josephine Lake
Legend
Cabins
Mooring Buoy
5000 Road Number
0 10 20 Mi.

FIGURE 3

The third important piece of legislation was passage of the Alaska Lands Act (known formally as the Alaska National Interest Lands Conservation Act) on December 2, 1980. This Act established the following wildernesses within the Ketchikan Area:

Coronation Island Wilderness	19,122 acres
Maurelle Islands Wilderness	4,424 acres
South Prince of Wales Wilderness	97,000 acres
Misty Fjords National Monument Wilderness	2,136,000 acres
Warren Island Wilderness	11,353 acres
Total acreage	2,267,899 acres

Total formal wilderness established within the Tongass is 5.13 million acres.

The Wilderness areas will be managed as directed by the 1964 Wilderness Act as amended by the Alaska Lands Act. Authorized uses which have a direct bearing on the public recreation cabins are as follows:

1. Fishing, hunting, and trapping will continue even within the National Monument.
2. Subsistence uses, including sport hunting and fishing, will be given special attention.
3. Existing public recreation cabins will continue to be maintained and may be replaced as needed. A limited number of new public cabins may be added if needed for health and safety reasons.
4. Use of temporary campsites, shelters, and other temporary facilities and equipment related to hunting and fishing will continue.
5. Existing guides and outfitters may continue to offer services under special use permits.
6. Existing use of airplanes, motorboats, (and snow machines - none on Ketchikan) will continue and can only be restricted or prohibited after public hearings.

Items 3 and 6 ensure the public cabins will continue to be managed as in the past. What these three pieces of legislation do is drastically change the traditional land management pattern on the Tongass and require a fresh look at any cabin expansion or replacement program.

VI. SOCIAL SETTING

Southeast Alaska is a fairly cohesive unit, not only environmentally but socially as well. Geographically the area is rather isolated, cut off from the rest of the continent by an almost impenetrable range of mountains. Communities, both large and small, cling to the narrow coastal shores. Inhabitants engage in similar livelihoods and avocations throughout the region.

Not only are physical conditions markedly similar from place to place, but the people of the region also share many values as well. Choosing to live in Southeast Alaska means giving up many conveniences inhabitants of other areas of the country take almost for granted. Such amenities as convenient transportation, well-stocked markets, readily accessible medical facilities, reliable communications, and entertainment, cultural, and education opportunities may be limited or nonexistent in small Alaskan communities. Many people, however, are willing to sacrifice these amenities for such advantages as a slower pace of life; a cleaner, quieter and more aesthetically pleasing environment; abundant outdoor recreation opportunities; a friendlier atmosphere; and greater independence. In short, many people choose to live in Southeast Alaska because they believe the region offers them opportunities to enjoy a way of life unattainable elsewhere.

The demand for dispersed recreation is expected to increase in Southeast Alaska, partially because supply creates demand but also because of promotional efforts and national publicity resulting from the d-2 lands deliberation. The Alaska Division of Tourism indicates that short adventure or wilderness touring on national parks or national forests is the faster growing segment of the visitor market in Southeast Alaska. Fishing and, to a lesser extent, hunting are also attracting an increased share of visitors to the region. The five recreational activities with the greatest economic impact are, in order of descending importance, charter fishing, yachting, unassisted fishing, unassisted hunting, and tied for fifth place, guided hunting and ferry touring. With the continuing decline in the value of the dollar in world markets, trips to Alaska become a better buy for both Americans and foreign visitors alike.

The number of visitors entering Southeast Alaska as tourists via cruise ships, Alaska Marine ferry, airline, and highway has been estimated as increasing from a total of 129,000 in 1970 to 236,000 in 1974. This general trend in tourism is confirmed by other analyses of use of recreation facilities, nonresident fish and hunting licenses, etc. (Clark and Lucas 1978).

The future of tourism depends not only upon the availability of a wide range of high-quality recreational resources but also upon factors external to the region (national income and demographic trends, development of access, etc.). Rates of future changes will probably decline progressively because of economic limits to future investment in transportation access. The composition of tourists will probably shift from those on package cruise trips to independent travelers in camper and backpacker categories (excerpts from Tongass Land Management Plan).

VII. RECREATION SETTING 1/

The Tongass National Forest's remarkable combination of natural and cultural features attracts both local and non-local recreationists. The great size of the forest, its predominantly undeveloped character, and its low population density impart a feeling of vastness, wildness, and solitude that is difficult to find in today's world.

1/ Abstract from TLUMP

The Alexander Archipelago, most of which is encompassed by the Tongass, is typified by intricate inland waterways, more than a thousand islands, hugh glaciers, fiords, rugged mountains, lakes, rivers, primeval forests, large or unusual fish and wildlife populations, and striking Native art forms. These features, which are distributed throughout the forest, provide the basis for a wide range of outstanding recreation opportunities.

The forest is exceptionally well suited for dispersed recreation activities. The many sheltered marine waterways and numerous inland lakes allow boat or aircraft access to most areas of recreational interest. The only real limitation is the relatively high cost of transportation to areas removed from population centers.

Access is difficult over much of the land because of its steepness and dense vegetation. Consequently, most recreation use occurs within a mile or so of the beach, along the rivers and streams, around fly-in lakes, and on other lands accessible by road or trail. Extensive alpine lands also offer considerable recreation opportunities where they are accessible.

The Tongass Land Use Management Plan divided recreational uses into three broad categories for inventory purposes: dispersed primitive, dispersed semiprimitive, and concentrated recreation. They are defined as follows:

Dispersed primitive -- Recreational pursuits involve isolation and an appreciation of the natural environment. They provide a high degree of challenge and risk, and they require a high degree of self-reliance and outdoor skills. Major activities include fishing, hunting, backpacking, and watching or photographing wildlife. Nature is met on its own terms without convenience facilities, except for access by boat or air.

Opportunities for dispersed primitive recreation are abundant because of the large amount of roadless area and the small number of users. Of the 867 Value Comparison Units (VCUs) on the forest, 316 rated high or very high for dispersed primitive recreation, 339 were rated moderate, and 212 received low ratings. A full description of the rating system appears in the Recreation/Wilderness Task Force Working Report, TLUMP.

Dispersed semiprimitive -- Recreational pursuits require a moderate to high degree of self-reliance and basic outdoor skills. Activities are often oriented toward the taking of fish, wildlife, and edible plants. The natural environment dominates, but some modifications for human convenience are allowed. Rudimentary roads or trails, as well as air and small boat access, may be available.

Opportunities for dispersed semiprimitive recreation are abundant because of the large amount of relatively undeveloped forest land, air and water access, primitive trails, both public and special-use cabins, and old logging roads. These opportunities were rated high in 194 VCUs, moderate in 166, and low in 407.

Concentrated -- Recreational pursuits include groups learning and structured activities such as downhill skiing and organized sports. A moderate to high level of sport skills is required. Although the natural environment is important, modifications for comfort, convenience, and participation are emphasized.

National Forest lands surrounding the communities are often highly suitable settings for concentrated recreation and provide good potential for facility development. However, opportunities for concentrated recreation are the least abundant of the three major types, primarily because large numbers of users are necessary to justify the expense of development. Consequently, those developments that do exist are found near urban centers such as Ketchikan, Sitka, and Juneau. Only 14 VCUs rated high, 32 rated moderate, and 821 scored low for this type of recreation opportunity.

Recreation cabins seem to fit most readily in the dispersed semiprimitive category since modifications for human convenience are allowed. However, the wilderness d-2 legislation also allows the placement of new cabins within those VCUs classified as dispersed primitive.

The Tongass Land Use Management Plan placed 367,000 acres within the Ketchikan Area in Land Use Designation II, dispersed recreation. This acreage combined with the 2,267,899 acres in formal wilderness and 212,899 acres remaining in LUD I totals 3,034,899 acres reserved for dispersed primitive or dispersed semiprimitive recreation. Thus, 55 percent of this Area readily lends itself to the cabin program.

Assumptions

There are a number of assumptions contained within the Southeast Area Guide which are appropriate when considering the future of the Forest recreation cabin program. These assumptions are as follows:

1. The combination of unique recreation resources in Southeast Alaska will receive increasing local, State, National and International attention and use.

2. Allocation of land primarily for recreation will increase.

3. Recognition and maintenance or enhancement of natural beauty and other aesthetic values will be increasingly important in all uses and activities.

4. All land ownerships will satisfy the demand for private recreation residences and concessionaire developments.

5. The Alaska Marine Highway and airlines will increase their capacity and Alaska State ferries will operate at full capacity during summer months, generating additional interest in Southeast Alaska. Available ferry capacity will limit numbers of visitors with road-oriented recreational equipment.

6. Tour ship excursions to Southeast Alaska will increase, taking greater numbers of visitors through the forest.

7. There will be additional ferry service to smaller island communities with more visitors using the surrounding areas.

8. The numbers and size of pleasure boats having overnight accommodations will continue to increase with more travel emanating from the Pacific Northwest. Use will radiate from communities to more remote forest areas.

9. Many visitors who come via the Marine Highway will have recreational camping vehicles and cartop boats allowing them to utilize recreational opportunities accessible from the road system.

10. Most development will occur on commercially timbered forest lands. In addition to timber production, significant portions of these timbered lands are also in demand for roadless recreational designation or classification because of their recreation quality, saltwater access, or other features.

11. Trails are an essential part of the overall recreation program.

12. The Tongass National Forest is well suited for roadless dispersed types of recreation such as hunting, fishing, boating, beachcombing, camping, wildlife observation, and hiking.

13. The demand for viewing and photographing wildlife in natural surroundings will increase, particularly in more accessible areas. Seabird colonies, bald eagles, mammal rookeries, and viewing areas for brown bear, mountain goat, and waterfowl will serve as foci for this trend.

VIII. RECREATION CABINS

The Forest presently maintains 53 public recreation cabins. This does not include the five cabins recently removed from the system when lands were conveyed to Native groups. Refer to Table 1 for location and use.

Recreation cabins are reserved for use under a reservation permit system. Reservations may be made up to 180 days in advance. The cabin fee and maintenance charge authorized by the Granger-Thye Act is $5 per day. This fee is scheduled to double by 1982 since it has not changed since 1973.

Any number of persons may occupy a cabin for a night. Checkout time is 12 noon. Use under each permit is limited to a stay of 7 days between April 1 and October 31 and 10 days between November 1 and March 31. Permits are issued on a first-come first-serve basis to any person over 18 years of age. A reservation cannot be confirmed until payment is made. A refund for unused reservations may be made if requested in writing at least 10 days before the date of use. Permits will not be issued to a commercial guide or outfitter for commercial use.

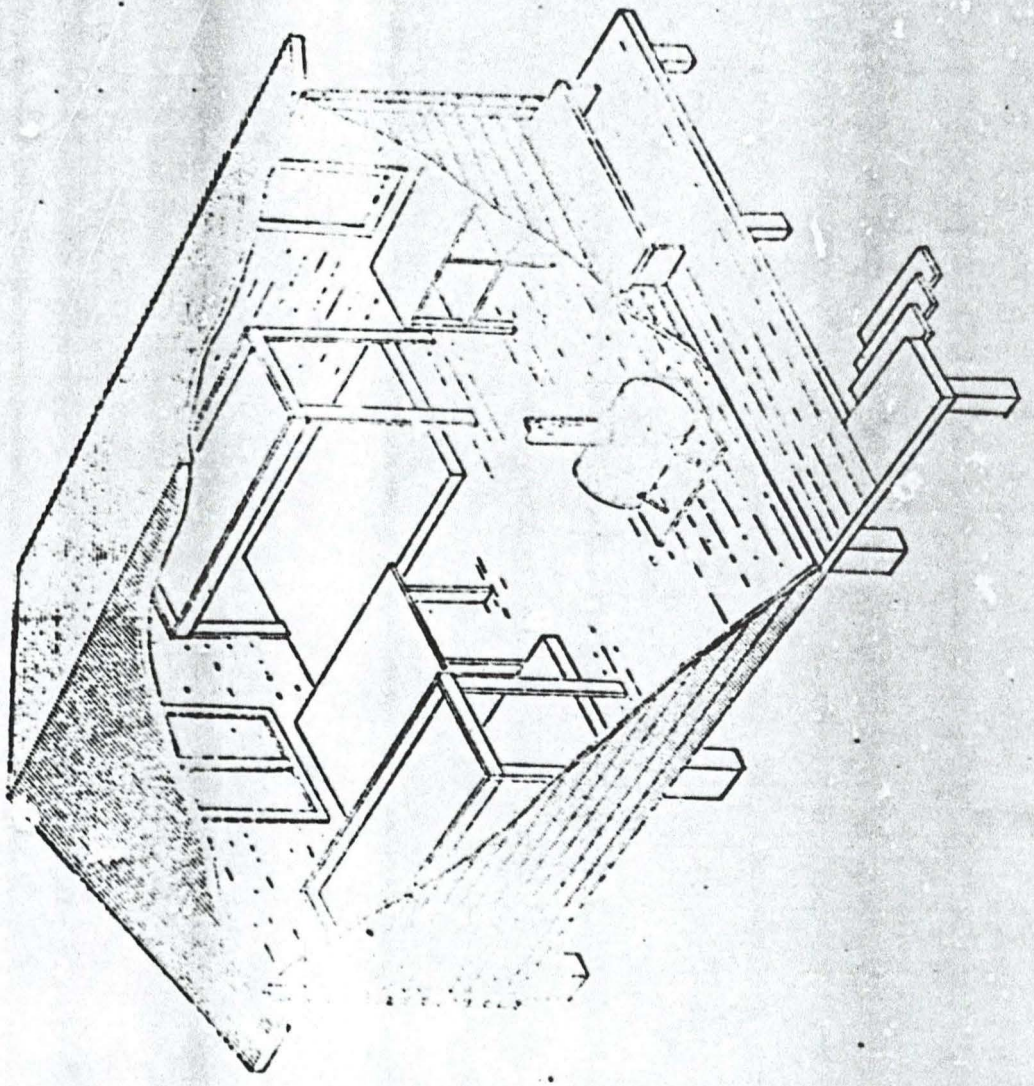
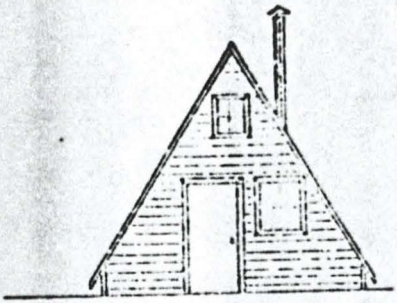
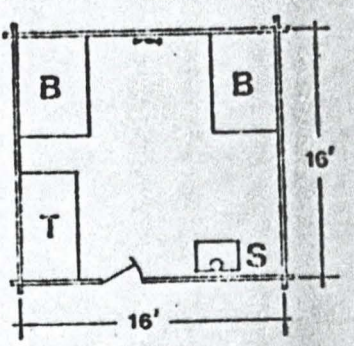


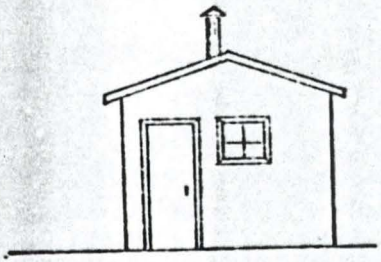
FIGURE 4

TYPICAL CABIN LAYOUTS

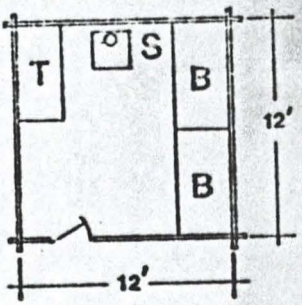


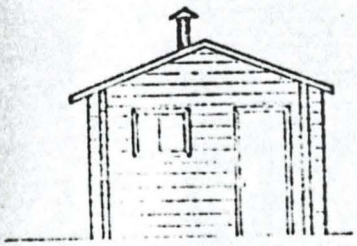
A-FRAME



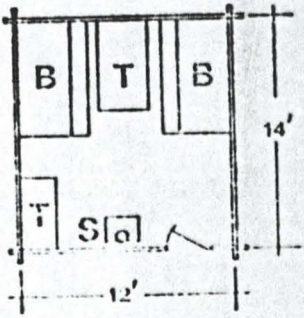


PLYWOOD





PAN-ABODE



B DOUBLE BUNKS

S STOVE

T TABLE

FIGURE 5

TABLE 1

1980 Recreation Cabin Use
RIM Printout No. 19 3/

CABIN	MANAGED SEASON-DAYS	REPORTED FY1980 USE (RVDS)	PERCENT OF USE
Karta Lake	244	600	59.0
Staney Creek 1/	214	500	52.0
Wilson View	214	500	52.0
Reflection Lake	183	400	48.6
Salmon Lake	185	400	48.0
Kegan Creek	244	500	45.5
Fish Creek	244	500	45.5
Naha River	306	600	43.5
Manzanita Lake	214	400	41.5
Wilson Narrows	214	400	41.5
McDonald Lake	214	400	41.5
Sweetwater Lake 1/	214	400	41.5
Kegan Cove	244	400	36.4
Humpback Lake	183	300	36.4
Heckman Lake	244	400	36.4
Grindall Island 1/	199	300	33.5
Alva Bay 1/	214	300	31.1
Sarkar Lake	214	300	31.1
McGilvery Creek	214	300	31.1
Salmon Bay Lake	214	300	31.1
Patching Lake	214	300	31.1
Plenty Cutthroat	214	300	31.1
Red Alders	214	300	31.1
Fisheries	244	300	27.3
Jordan Lake	244	300	27.3
Blind Pass 1/	244	300	27.3
Winstanley Island 1/	244	300	27.3
Big Goat Lake	183	200	24.2
Helm Bay 1/	244	500	22.7
Winstanley Lake	214	200	20.6
Wilson Overflow	214	200	20.6
Checats Lake	214	200	20.6
Ella Narrows	214	200	20.6
Hugh Smith	214	200	20.6
Orchard Lake	214	200	20.6
Beaver Lake	214	200	20.6
Point Amargura 1/ 2/	244	200	18.2
Barnes Lake	244	200	18.2
Anchor Pass 1/	244	200	18.2

1/ Cabin located immediately adjacent to saltwater.
2/ A-frame constructed rather than Pan-Abode.
3/ Refer to RIM Special Printout No. 29, pages 7, 8, and 9 calculated for reasonable use at full occupancy rather than theoretical capacity.

CABIN	MANAGED SEASON-DAYS	REPORTED FY1980 USE (RVDS)	PERCENT OF USE
Blue Lake 2/	153	100	14.4
Deer Mountain 2/	153	100	14.4
Essowah Lake	183	100	12.2
Rainbow Lake	214	100	10.4
Honker Lake	214	100	10.4
Red Bay Lake	214	100	10.4
Shipley Bay 1/	214	100	10.4
Luck Lake	214	100	10.4
Portage Cabin	214	100	10.4
Josephine Lake	214	100	10.4
Black Bear Lake	214	100	10.4
Billy Goat Creek	214	100	10.4

1/ Cabin located immediately adjacent to saltwater.
2/ A-frame constructed rather than Pan-Abode.
3/ Refer to RIM Special Printout No. 29, pages 7, 8, and 9 calculated for reasonable use at full occupancy rather than theoretical capacity.

All cabins are equipped with a wood stove, two double and two single bunks, and a pit toilet (fig. 4). Wood is not usually split, but a maul, axe, and wedge are provided for this purpose. Cabins located adjacent to lakes are equipped with a fourteen foot aluminum skiff. Visitors sometimes bring a small outboard motor along with their bedding, cooking utensils, lantern, food, and other camping gear.

The two currently approved cabin styles are a 16 x 16 foot A-frame and a 12 x 14 foot precut cedar tongue and groove prefabricated cabin (fig. 5). Only three of the cabins on the Ketchikan Area are A-frame construction (Table 1). The cabins sleep a total of six people in the double and single bunks although the average party consists of three people. Garbage removal is handled by the "Pack In - Pack Out" program due to the inaccessibility of the cabins for maintenance purposes. Drinking water is usually found in the form of a lake or stream within one hundred feet of the cabin. Visitors are advised to boil drinking water or treat with iodine or chlorex prior to use. A brochure titled "Recreational Facilities, Alaska Region Pamphlet Number 65" is provided to the public to aid in their choice of a cabin location and describes recreational and wildlife activities in the area (Appendix). A response form instituted in 1978 is currently supplied to each visitor with the reservation. Its purpose is to gather information on current maintenance needs. Maintenance has improved significantly through this system due to better scheduling and transportation of proper replacement materials when visiting a particular site. In some cases, deficiences have been corrected by furnishing the cabin permittee with the needed materials, i.e., oars, maul, stove pipe, etc.

The length of season varies with the cabin location. A high country lake such as Billy Goat Lake may freeze over in early winter and not be accessible by float plane until the following June. Most cabins, however, receive spring, summer, and fall use. Those cabins accessible to steelhead fishing receive the heaviest springtime use. Cabins accessible to mountain goat populations or good deer herds receive the heaviest fall use.

A well managed site is generally considered to be one that receives between 20 and 40 percent occupancy rates. Theoretical seasonal capacity is calculated by multiplying a cabin capacity of five individual times the length of operating season. Percentage of theoretical capacity is only a barometer of use since average party size is three persons. Cabin permits are issued for an individual party, not until the capacity of five persons is reached. A cabin such as the Karta Lake Cabin may be booked solid every weekend through the summer months and still only show twenty-five percent theorectical capacity. Occupancy calculations for the purpose of this study are taken from the FY1980 RIM printout No. 19 which calculates use based on an average of three people per occupied unit (cabin). Refer to Table 1.

Research

Three specific pieces of research are currently available which pertain to recreational cabin use on the Tongass National Forest. The first two of these documents listed below are more concerned with recreation as a whole rather than specifically with cabins.

> Report by the Comptroller General of the United States: How Should Alaska Federal Recreational Lands be Developed? Views of Alaska Residents and Visitors, General Accounting Office (GAO) September 27, 1979.
>
> Residents and Resources: Findings of the Alaska Public Survey on the Importance of Natural Resources to the Quality of Life in Southeast Alaska, by William Alves, Institute of Social and Economic Research, University of Alaska.
>
> Participation, Preference, and Characteristics of Outlying Cabin Users in Alaska National Forests by Alan Jubenville, William G. Workman, and Wayne C. Thomas, from the Agricultural Experiment Station, University of Alaska, Fairbanks, Draft Copy of Bulletin 57.

The General Accounting Office's (GAO) report indicated a general hesitancy toward recreation development in Alaska. The questionnaire contacted both residents and nonresidents. One of the sources used to contact individuals was the Chugach National Forest's cabin reservation list. Future developments of cabins were favored by 29 percent of the respondents. This was second behind campgrounds which received 35 percent response favoring future development. There was no indication of the percent opposed to development or those indifferent toward development. A major consideration is that this survey contacted, in part, those people who were successful in obtaining a cabin reservation.

Residents and Resources, University of Alaska, is a study based on 1,255 hour-long interviews conducted in the spring of 1979 with Southeast Alaska residents. It was funded by the Forest Service. The questions dealt with the resident's use of the natural resources. Eighty-six percent of respondents ranked Forest Service management of backcountry cabins as good in a ranking system of good, fair, and poor. Weather was listed as the number two barrier to outdoor recreation which seems to confirm the unpopularity of tent camping as opposed to recreation cabins in Southeast Alaska with its inclement weather.

The supply and demand assessment in "Outlying Cabin Users", University of Alaska, deals with the cabins in a general way. The predictions of an approximately 45 percent increase in recreation use between 1979 and 1990 are considered the most important data pertaining to cabins.

Jim Tallerico, Chugach Land Use Planner, in his 1979 study of recreation cabin needs for the Chugach National forest incorporated an extensive analysis of the "Outlying Cabins" study by the University of Alaska into his study. "Residents and Resources" was not yet published nor did it apply to the Chugach since it was limited to Southeast Alaska.

The "Outlying Cabin" study is the most informative research on the cabin program to date. Registration information came from the Chatham Workcenter in Juneau for the Tongass National Forest and Anchorage headquarters for the Chugach National Forest. Data from the two National Forests was analyzed to determine if there were two different populations. The evaluation indicated no differences between visitors in the two forests at the 95 percent confidence limits. Tables 2 through 28 were extracted from the draft bulletin and provide a good description of users and their preferences. These studies follow.

TABLE 2

Type of Party

Category	Relative Frequency (PCT)
A Person	4.1
Single Family	28.5
Two Families	15.8
Group of Friends	38.5
Organized Group	2.8
Other	10.3
TOTAL	100.0

Table 3

Size of Party

No. People	Relative Frequency (PCT)
1	3
2	28
3	15
4	26
5	8
6	8
7	3
8	3
9 or more	6
TOTAL	100.0

Table 4

Mode of Travel

Category	Relative Frequency (PCT)
Walked	42.3
Skiied	17.3
Private boat	8.0
Charter Boat-Air	18.6
Private Aircraft	6.6
Other	7.3
TOTAL	100.0

Table 5

Main Purpose of Trip

Category	Relative Frequency (PCT)
General Recreation	26.5
Hunt	16.5
Fish	13.5
Backpack-Hike	10.5
Ski	9.3
Relaxation	8.0
Other	15.7
TOTAL	100.0

Table 6

Length of Stay

Number of Nights	Relative Frequency (PCT)
1	35.2
2	26.7
3	15.0
4	7.8
5	7.0
6 or more	8.3
TOTAL	100.0

The mean length of stay was 2.6 nights with over 60 percent of the parties staying two nights or less. Where charter service, either boat or plane, was the primary means of access, the length of stay was longer. A shorter length of stay was noticed for cabins with trail access.

TABLE 7

Seeing Other Parties

Number Parties Seen	Relative Frequency (PCT)
0	38.2
1	20.0
2	18.9
3	9.8
4	5.4
5 or more	7.7
TOTAL	100.0

Over 75 percent of the parties had two or less encounters with other groups and nearly 40 percent saw no one else.

TABLE 8

Number of Previous Visits to the Particular Cabin[a]

Category	Relative Frequency (PCT)
0	68.5
1	14.2
2	8.3
3	4.7
4	2.0
5 or more	2.2
TOTAL	100.0

[a] The one they had just visited.

A majority of users have not peviously visited the cabin in question but as indicated in table 9, over half the visitors have used at least one other cabin in the past 3 years. This indicates that people are exploring different areas and different cabins.

TABLE 9

Number Times Used Forest Service Cabin
Within the Past Three Years

Category	Relative Frequency (PCT)
0	47.2
1	15.2
2	10.9
3	11.3
4	3.9
5 or more	11.5
TOTAL	100.0

TABLE 10

Activity Participation by Parties
(Number of Days and Hours Per Day-Ranked by Mean Days)

Activity	No. Parties	Days		Hours/Day	
		Mean	Mode	Mean	Mode
Motorboating	46	3.83	3.0	4.40	4.0
Big Game Hunting	93	3.61	3.0	7.88	6.0
Snowmachining	23	3.52	2.0	6.45	8.0
Canoe-Kayak-Rafting	76	3.21	1.0	3.10	2.0
Saltwater Fishing	27	3.10	1.0	4.90	2.0
Nature Photography	134	3.03	3.0	2.70	1.0
Hiking	246	2.91	2.0	4.22	6.0
Bird Watching	60	2.87	1.0	2.64	1.0
Picnicking	35	2.71	2.0	2.18	1.0
X-C Skiing	74	2.65	2.0	6.65	6.0
Beachcombing	48	2.62	1.0	2.54	2.0
Stream Fishing	100	2.47	1.0	3.92	2.0
Lake Fishing	195	2.38	2.0	3.97	2.0
Waterfowl Hunting	22	2.37	2.0	4.73	4.0
Flying for Pleasure	16	1.93	1.0	2.12	1.0
Climbing	26	1.88	1.0	4.16	4.0
Berries-Mushrooms	35	1.97	1.0	2.54	1.0

In terms of number of parties, hiking, lake fishing, nature photography, stream fishing and big game hunting were the activities that had the greatest participation.

The following tables, also from the University of Alaska cabin study, are an evaluation of the cabin program as perceived by the users.

Table 11

Liked Best About Use of Cabin
(Open-ended question)

Category	Relative Frequency (PCT)
Equipment within cabin (axe, bunks, etc.)	30.6
Scenery	26.8
Cabin (nice shelter)	22.2
Stove (warm & dry)	20.4
TOTAL	100.0

Many people enjoy the cabin and associated equipment. The single most important factor not associated with the structure or equipment was scenery or the physical setting. This was an open-ended question and the response was interesting in that fish and wildlife did not rate as popular attractions. This is especially true when hunting and fishing rated so high in the purpose of trip category in table 5.

Table 12

Liked Least About Use of Cabin

Category	Relative Frequency (PCT)
Broken Stove	18.3
Dirty Cabin-garbage	10.3
Maintenance of beds & bedding	10.0
No wood or damp wood	8.6
Cabin too small	3.4
No axe or saw	2.7
Other (general maintenance)	46.7
TOTAL	100.0

The majority of items people were not satisfied with were maintenance items. Although nearly 30 percent of the participants indicated no complaints with the cabin, it is obvious that maintenance programs need to be improved.

Table 13

One Item That Made The Overall Trip Enjoyable

Category	Relative Frequency (PCT)
Secluded area	28.5
Available hunting and fishing	23.3
Quality scenery	21.0
Good cabin	16.4
Easy access	4.6
Other	6.2
TOTAL	100.0

Solitude, fish and wildlife, and scenery are considered the most important qualities in providing an enjoyable experience. The priority items recognized as important in making the trip enjoyable are very close to being equal but fish and wildlife again show-up as important factors. Solitude also becomes very important in the success of the recreation experience. The cabin seems to be taken for granted by many of the users.

Table 14

Stay Even If No Cabin Available

Category	Relative Frequency (PCT)
Yes	19.5
No	80.5
TOTAL	100.0

Table 14 indicates a majority of people would not have stayed or possibly even visited an area if a cabin were not available. This indicates the cabin system is successful, at least in some respects, in providing a means for some people to visit the more remote forest areas. It also suggests that a cabin may be more important to the recreation experience than indicated in table 13.

There is some indication, although not pointed out in any one particular table, that hunters are less dependent in respect to needing a cabin before they will visit an area. It seems that hunters will visit an area even if no facilities are available. However there is good reason to believe that a suitable shelter, such as a cabin, makes an area more attractive to hunters.

Table 15

Reason for Choosing Not to Stay[a]
(Open-ended question)

Category	Relative Frequency (PCT)
Non-availability of shelter	80.1
Lack of facilities (beds, cooking, etc.)	2.3
Lack of desired comfort, convenience and safety	7.1
Other	10.5
TOTAL	100.0

The cabins obviously play a major role in the recreation experience. Without cabins it seems that many people will not pursue this type of experience. The scenery, seclusion, and even quality fishing, only add to the enjoyment of a recreation experience for many people if a cabin is available.

Tables 16 and 17 contradict the GAO report in respect to the desire for more cabins.

Table 16

Are There Areas With Too Many Cabins?

Category	Relative Frequency (PCT)
Yes	4.3
No	95.7
TOTAL	100.0

Table 17

Are There More Areas Needing Cabins?

Category	Relative Frequency (PCT)
Yes	42.9
No	57.1
TOTAL	100.0

The following tables, also from the University of Alaska cabin study, illustrate economic data related to using the cabin. This data represents both Southeast and Southcentral cabins. It is important to note that approximately 40 percent of the cabins in Southcentral are connected by trail systems. This factor significantly reduces the cost associated with using the cabin. Length of stay was directly related to expenditure. The larger the expenditure, the longer the stay.

TABLE 18

Average Per Group Transportation Expenses

Category	Relative Frequency (PCT)
$ 0.01 - 25.00	47.2
25.01 - 50.00	8.3
50.01 - 100.00	10.4
100.01 - 200.00	20.8
200.01 - 300.00	7.2
300.01 - or over	6.1
TOTAL	100.0

Mean = $75.46
Mode = $ 0.01 - 25.00
Median = $46.97

TABLE 19

Average Lodging Expenditures

Category	Relative Frequency (PCT)
$ 0.01 - 10.00	24.7
10.02 - 20.00	17.6
20.01 - 30.00	12.4
30.01 - 40.00	8.3
40.01 - 50.00	6.5
50.01 - 100.00	13.4
Over 100.00	17.0
TOTAL	100.0

Mean = $33.63
Mode = $ 0.01 - 10.00
Median = $31.15

Lodging cost included motel costs, cabin fees, and camping equipment purchased specifically for the trip. The longer the stay, the greater the cost. This was related to the $5 per day fee. It was also pointed out that Southcentral residents usually hiked to the cabins and stayed for a shorter time period. This resulted in lower lodging costs.

TABLE 20

Food Expenditures

Category	Relative Frequency (PCT)
$ 0.01 - 10.00	16.0
10.01 - 20.00	23.9
20.01 - 30.00	17.7
30.01 - 40.00	8.6
40.01 - 50.00	11.2
50.01 - 100.00	15.3
Over 100.00	7.3
TOTAL	100.0

Mean = $35.01
Mode = $10.01 - 20.00
Median = $30.68

Food expenses were again found to be related to length of stay, consequently Tongass National Forest cabin users spent more because of the high air charter costs.

TABLE 21

Miscellaneous Expenditures

Category	Relative Frequency (PCT)
$ 0.01 - 10.00	56.8
10.01 - 20.00	17.5
20.01 - 30.00	7.4
30.01 - 40.00	1.7
40.01 - 50.00	4.4
50.01 - 100.00	7.1
Over 100.00	5.0
TOTAL	100.0

Mean = $22.11
Mode = $ 0.01 - 10.00
Median = $13.00

It was noted that non-local visitors tended to spend more on miscellaneous items. Cost for miscellaneous items also went up as length of stay increased.

Though not specifically addressed in the research, it is expected that cost between resident and non-resident users is significantly different. A major area of difference seems to be mode of travel. Non-residents seem to spend less time hiking and often fly to cabins that have trail access. It is also expected non-residents tend to pay more in lodging costs and other travel costs that are only indirectly related to cabin use.

The following socioeconomic data, also from the University of Alaska cabin study, is provided to give a more complete picture of the cabin user. Table 22 indicates that many visitors have an income over $30,000. It should be noted that very few Alaska visitors have a yearly income below $10,000 and statewide, few incomes fall below $10,000 except in small bush communities. The average income for the Anchorage area was $23,618 in 1978 for the head of the household. The medium income for the entire household was $30,115 in 1978.

Table 22

Income

Category	Relative Frequency (PCT)
Less than $10,000	6.1
$10-$19,999	21.1
$20-$29,999	26.1
$30-$39,999	23.9
$40,000 or more	22.8
TOTAL	100.0

Table 23 indicates many cabins users are white collar workers. The military showed the lowest participation rate but considering the military makes up 7.3 percent of the population this seems to indicate average participation.[4] White collar workers seem to be equally well represented since 46.3 percent of the Anchorage population fall into this category.

4 Ender, Richard L. Populaton Profile. 1978.

TABLE 23

Occupation

Category	Relative Frequency (PCT)
White Collar	44.9
Blue Collar	24.5
Military	6.5
Other	11.4
Retired & Unemployed	12.7
TOTAL	100.0

TABLE 24

Age

Category	Relative Frequency (PCT)
0 - 17 Years	1.4
18 - 24	12.1
25 - 34	50.0
35 - 44	22.4
45 - 54	9.9
55 - 64	3.4
65+	0.7
TOTAL	100.0

The data concerning preferred cabin styles are shown in Table 27. Using a sketch of six different styles of cabin, each respondent was asked to circle the one he most preferred and cross out the one he least preferred. If style was not important, he so indicated. Cabins B and E were open to the weather and were preferred least by 85 percent of respondents. These were felt not good choices because they would not protect the participant from snow and rain, and give him warmth. Style A was preferred most (48.9 percent) and is styled similar to a Pan Abode or conventional cabin. Second in preference (27.9 percent) was the A-frame design.

Table 25 indicates a littler over half the visitors have a college degree and the majority have some post high school education.

TABLE 25

Education

Category	Relative Frequency (PCT)
11 or less years	3.4
High school diploma	16.4
Less than college degree	23.7
Bachelor's degree	19.8
Graduate study	36.7
TOTAL	100.0

Table 26 shows the majority of cabin users are male. This is the single most impressive deviation between cabin user groups and the general Ketchikan population.

Table 26

Sex of Cabin Visitor

Category	Relative Frequency (PCT)
Male	82.8
Female	17.2
TOTAL	100.0

TABLE 27

Preferred Cabin Styles

Cabin Style	Preferred Most	Preferred Least
A	235 (48.9%)	12 (2.5%)
B	9 (1.9%)	55 (11.6%)
C	134 (27.9%)	23 (4.9%)
D	84 (17.5%)	19 (4.0%)
E	2 (0.4%)	349 (73.8%)
F	17 (3.5%)	15 (3.2%)
TOTAL	481 (100.0%)	473 (100.0%)

Table indicates the preferred items by category which the public would like to see furnished with the cabins. Those items listed as necessary are supplied under our present policy.

TABLE 28

Response to Specific Cabin Facilities/Equipment

Category	Equipment	
1. Necessary	Stove	(80.1%)
	Windows	(63.1%)
	Axe	(59.8%)
	Firewood	(52.1%)
	Screens	(48.6%)
2. Desirable	Boat	(68.7%)
	Firering	(57.4%)
	Picnic Table	(55.4%)
	Fireplace	(45.6%)
3. Unnecessary/Undesirable	Kitchen Utensils	(55.6%)
	Mattress	(52.6%)
	Pots and Pans	(48.0%)

Residents and Resources: Findings of the Alaska Public Survey on the Importance of Natural Resources to the Quality of Life in Southeast Alaska intensively analyzes the Southeastern resident as to his opinions and those needs his lifestyle demands. The following observations and Tables 29 through 38 were obtained from this study.

> "The rising cost of energy, which has had a significant impact on the pattern of recreation nationally, does not seem to have had much effect, thus far, on who and where Southeast Alaskans recreate. For the first time many recreationists mentioned cost as a barrier to their recreation. This suggests that if energy prices continue to rise in the future, people may curtail participation in some energy-intensive activities such as motorboating and flying and may choose to do others closer to home. If this happens, the location of recreational places would become relatively more important than their site characteristics.
>
> A review of past "State of the Art" projections of recreation demand suggests that they have not been sufficiently accurate to guide planning. Recreational demand forecasting remains a very imperfect art. Besides such universal problems as the weather and not enough free time, one major barrier to recreation was sufficient accessible places for dispersed recreation. This is a contrast to 1967 when the lack of facilities received far more mention as a problem. This shift is probably attributable to the great growth in participation in dispersed recreation since 1967.
>
> Two other difference in barriers are:
>
> > New emphasis on equipment costs, perhaps because many activities of increased popularity require expensive equipment.
> >
> > The need for information on how or where to engage in a recreational activity that has just been taken up by a respondent.
>
> A sizable fraction of all respondents indicated they would stop going to their favorite place if any of a number of development-related activities took place there. In terms of present recreational impact, the two most detrimental changes were (1) more recreationists (indicating that some already feel "crowding" is a problem) and (2) new logging."

The percentage of residents using the National Forest varied among uses and communities. Forty-nine percent of Ketchikanites interviewed indicated they used the Forest Service recreation cabins (Table 29). Eighty-six percent of Southeast Alaskans stated they remained a resident to be close to a wilderness environment. Eighty-four percent wanted the recreation opportunities to be self-reliant (Table 30).

As previously mentioned, eighty-six percent of the respondents ranked Forest Service management of the backcountry cabins as good (Table 31). Ten percent of those interviewed voluntarily mentioned the need for additional cabins (Table 32). Activities or improvements which make relatively intensive use of small amounts of land such as cabins, picnic areas, campsites and trails were not perceived as competing with other uses of the Forest (Table 33). Mining was the sole intensive land use thought to create a serious conflict.

The University of Alaska study also attempted to determine what Southeastern residents considered appropriate use of Alaskan wilderness areas. It left ambiguous whether wilderness areas referred to statutory wilderness areas or de facto wilderness. The majority favored allowing float and ski planes to land, building fish hatcheries and public cabins (Table 34). Wilderness under the final Alaska d-2 legislation allowed for these three uses with fish hatcheries being qualified to read as aquaculture projects. The majority felt building of commercial lodges and travel by snowmobile and dirt bike should be strictly regulated or banned. This is the direction for LUD II, dispersed recreation use contained within the Southeast Alaska Area Guide.

The significant difference between Southeast Alaska and the rest of the Nation is the Region's marine orientation and abundance of opportunities for dispersed recreation. Motorboating and hiking (beachcombing plays a major role) are double the National average (Table 35). About three quarters of all recreation days take place in the coastal areas (Table 36) which lends support to a saltwater cabin system based on recreational opportunities and public safety in inclement weather.

Table 37 indicates changes at favorite overnite recreation areas that 70 to 80 percent of the respondents thought would be detrimental to their visit. Roughly half this number would discontinue visiting these areas if such changes occur. The only conficts that could be anticipated would be clearcuts with associated roads and more recreationists. These would be most apt to occur in LUD IV's which indicates a lower priority for cabin site selection.

Table 38 lists the characteristic importance of the respondents favorite recreation site's features. Those who most value a place's natural features and its sense of isolation are more sensitive to change than those who place a high value on easy access and site improvements. Hunters and fishermen were not as sensitive to change with the exception that hunters reacted strongly to more recreationists and new roads.

Table 29 National Forest Use by Place of Residence in Southeast Alaska

Region	Visited Tongass or Chugach N.F.	Used cabins	Used camp-sites or picnic facilities	Used trails	Used back-country	Hunted or fished in N.F.	Rec. use of logging roads	Drinking water from	Affected by logging	Affected by mining	Affected by salmon stream management
	95%	41	74	76	48	63	43	43*	49	23	54
1. Large urban communities	96	45	80	83	51	59	40	44	49	25	53
• Juneau	96	40	77	83	51	59	26	29	37	27	56
• Ketchikan	98	49	85	89	52	52	46	55	58	32	53
• Sitka	96	50	77	75	49	73	66	67	66	8	45
2. Medium communities	90	38	55	55	44	61	70	37	61	21	59
• Wrangell	97	53	44	50	42	64	78	47	75	22	58
• Petersburg	99	35	81	69	53	68	86	43	51	12	68
• Haines	70	26	30	37	41	56	41	22	74	44	63
• Skagway	70	15	32	50	25	25	30	5	30	15	20
3. Native communities	84	17	50	48	36	61	49	41	32	6	57
4. White subsistence communities	91	44	34	72	56	66	37	53	38	19	78
5. Logging camps	100	56	78	33	44	89	100	67	100	22	56

*Twenty-one percent "not sure" is not included here.

Table 30 Why Southeast Alaskans Came To or Stay in the Region

Reason for coming to or remaining a resident of region	"very important" or "important" in Southeast Alaska	Rank		
		Southeast	Southcentral	Interior
Being close to a wilderness environment	86%	1	3	4
Recreation opportunities	84	2	1	3
To be self-reliant		3	2	1
Living near the water	84	4	11	12
Being part of a small community	82	5	10	5
Get away from urban problems	79	6	6	6
Good hunting and fishing	78	7	8	9
Chance to be independent, start something new	78	8	4	2
Long-term economic opportunity	74	9	5	8
Challenging or exciting job	70	10	7	7
Being near friends and family	61	11	12	11
Immediate income gains	60	12	9	10

Table 31 Southeast Alaskans' Opinion of Forest Service Management by Resource Area

Resource Area	Percentage of Respondents Ranking FS Management as "Good"
Backcountry cabins	86%
Water resources (for municipal use)	79
Campsites, picnic areas	75
Trails	70
Backcountry	67
Sport hunting and fishing habitat	65
Logging roads for recreational use	56
Timber harvesting	33
Management of salmon spawning stream for commerical fishery	32
Mining policy	20

Table 32 Suggestions for Change in Forest Service Management of Recreational Facilities and Improvements

Recreational Improvement	Suggested Management Change with Number of Mentions	
1. Cabins	Better maintenance or clean-up	-32
	Provide more cabins	-16
	Restrict motorized access	- 5
	Other	- 7
	Total number of respondents offering suggestions	-55
2. Campsites and picnic facilities	Better maintenance or clean-up	-88
	More facilities	-53
	Provide dry firewood	-32
	Better restrooms	-15
	Better facilities generally	- 4
	Don't charge for use	- 3
	Other	-32
	Total number of respondents offering suggestions	-181
3. Trails	Better maintenance, clear them, brush them out, make them wider	-134
	Provide more trails, more emphasis on trail development generally	-72
	Clean up trail litter, provide more trash cans	-34
	Need better signing, directions, markers on trails	-16
	Need better trail maps and public information program	- 9
	Provide separate trails for different activities (motorized v. non-motorized)	- 8
	Do nothing, don't tamper	- 8
	More cabins and trail shelters	- 4
	More other backcountry facilities	- 2
	Should have less management responsibility	- 1
	Other	-23
	Total number of respondents offering suggestions	-241
4. Logging roads	Upgrade them	-92
	Do nothing	-82
	Close them	-21
	Other	-24
	Total number of respondents offering suggestions	-212

Figure 33 Perceived Compatibility of National Forest Uses
Percent (%) Who Felt Primary Activity Conflicts with Specific Other Uses of the Forest

Primary Activity	Logging	Sport fishing and hunting	General recreation	Camping and hiking	Water quality	Commercial fishing	Wilderness preservation	Wildlife management	Subsistence	Mining	Roads	% mentioning any conflict
Managing backcountry cabins	◐			◐	O							14
Managing campsites and picnic facilities	◐	O		O							◐	20
Managing trails	●		O	O	O	O	◐	O		O		21
Managing backcountry	◐				O					O	O	42
Managing hunting and fishing opportunities	●	O		O				O		O		40
Managing logging roads for recreational use	◐	O		O	◐		O	O				29
Managing watersheds to provide drinking water	◐	◐	◐		O							39
Managing logging	O	◐	◐		◐	O	◐	O				57
Forest service mining policy	O	◐	O	◐		O	◐	O	O	O		61
Managing salmon spawning streams for commercial harvest	◐	O	O	O	O	O	O	O	O	◐	O	60

Key:
No mention
O Less than 10%
◐ 10-24%
◕ 25-49%
● 50+%

Table 34 Appropriate Use of Alaskan Wilderness Areas

Use	Percent of respondents saying that the use should be: Generally allowed	Strictly regulated	Banned altogether
Allowing float and ski planes to land	76%	20%	4%
Travel by snowmobile	30	49	20
Travel by dirt bike	21	45	35
Building fish hatcheries	64	31	5
Building public cabins	57	35	8
Building commercial lodges	19	48	33

Table 35 The Most Popular Outdoor Recreation Activities: Southeast Alaska 1978-9 vs. the U.S. 1977[b]

Activity	Percentage of SE Adults Participating	Percentage of U.S. Residents 12 yrs. & Older Participating
Hiking and beachcombing	70 (31 noncoastal)	28
Motorboating	62	34
Walking, running for pleasure	62	68
Fishing	58	53
Driving for pleasure	57	69
Playing outdoor sports and games	42	56
Hunting	30	19
Camping	30	30 in developed areas 21 in primitive areas
Attending sports events	29	61
Bicycling	25/33[a]	47
Swimming, scuba	21/30[a]	63 pools 46 other
Canoeing, kayaking	20	16
Sledding, tobaggoning	19/26[a]	21
Cross country skiing	15	2
Flying	14	No information
Downhill skiing	11	7
Summer off-road vehicle (ORV) Travel	9	26
Sailing	9	11
Winter ORV travel	7	8
Horseback riding	2	15
Hang gliding	less than 1	No information
Golf	less than 1	16

[a]Where inclusion of children 12 through 17 years of age would change the percentage of Southeast Alaskans participating in an activity by more than 5 percentage points up or down, that figure is shown to facilitate comparison with the national participation data.

[b]Standard deviations for Southeast Alaska participation percentages range from 2 to 4 percentage points. Differences between Southeast Alaska and national figures of 5 percentage points or less are probably not statistically significant.

Table 36 Percentage of Recreation Days Taking Place on the Coast for Selected Dispersed Recreation Activities

Activity	% of Days On the Coast
Motorboating	89%
Kayaking, Canoeing	74
Sailing	—[a]
Fishing	80
Clamming, crabbing	100
Hunting[b]	79
Camping	34
Swimming	64
Hiking/beachcombing	89
All dispersed recreation[c]	approx. 75%

[a] Data not sufficient to calculate.

[b] Assumes all deer and waterfowl hunting is coastal, all other noncoastal.

[c] Includes above activities plus summer and winter off-road vehicles travel, flying, and cross-country skiing, all of which are assumed to be noncoastal.

Table 37 Sensitivity to Change at Favorite Place for Overnight Coastal Recreation Trips in Southeast Alaska, 1978-9

Change	% Responding That Change would Make Place "Less Attractive"	% Responding That Change Would Make Them "Stop Going There"	% Already Noticing Change There
Clearcuts	80.3%	37.4%	15.4%
New houses or buildings	80.2	42.0	14.4
New logging	77.4	40.9	20.7
New roads	77.1	34.6	10.0
Mine tailings	76.5	32.2	13.6
Log storage	75.9	33.9	11.1
More recreationists	73.0	32.9	42.2
Offshore oil drilling	72.0	41.4	7.1
Airplanes and helicopters	45.2	15.5	37.8
Shipping traffic	43.3	16.0	22.5
Commercial fishing (boats & gear)	21.8	11.4	41.2

Table 38 Sensitivity to Change at Favorite Coastal Recreation Spot by Important Characteristics of the Spot

Characteristic of Favorite Place	% Responding That This Characteristic is "Very Important" or "Important"	Sensitivity to Change Index[a] of Those Responding Characteristic is "Very Important" or "Important"
Good plane access	28%	57.3
Good boat access, moorage	75	60.5
Road access	18	68.0
Cabins available	31	61.2
Good saltwater fishing	72	62.3
Good clamming, crabbing	53	69.2
Good beachcombing, hiking, or walking	75	69.5
Good opportunity to view wildlife or birds	84	69.0
Good hunting	44	63.0
Undisturbed natural areas	79	74.0
Scenery	88	70.5
Good place to get away from others	91	70.2

[a]Index is the average of percents responding that each of 11 specific changes would make their favorite place "less attractive."

Summation of Research

The preceeding research tables from the two separate studies conducted by the University of Alaska are admittedly quite lengthy. Both studies contained some very good summary comments which can be used as criteria in future cabin policy. These summaries are presented below in full rather than allow possible misinterpretation to reduce their value.

1. The shift from community based to dispersed recreation will put increasing demands on the Forest Service, the agency managing most of the lands suitable for such recreation in Southeastern Alaska, to accommodate recreation demand. The nature of the activities experiencing the greatest growth in popularity means the most immediate need for accommodating this growth is in managing suitable areas in a way that will not detract from their value for recreation. Facility development will become less important.

2. An increasing concern with the cost of dispersed recreation activities, due in part to the high cost of fuels for transportation, will increase the demand for nearby areas for dispersed recreation. As energy costs increase, locational factors should receive more emphasis than site factors.

3. Recreationists are very sensitive to development activities in the vicinity of favored destinations for overnight coastal trips. Currently, crowding and logging are the two most important changes detracting from their enjoyment. This points to the need to avoid resource developments near favored places lest further recreation pressure be placed on unaffected recreation destinations.

4. Because future shifts in the demand for recreation activites can only very imperfectly be projected, (1) resource agencies should err on the side of caution in preserving suitable lands from changes that would diminish the value of such lands for recreation for very long times, and (2) let currently unmet or "latent" demand guide recreation improvement programs.

5. Type of Party: Those who visited as a group of friends had participated more in the cabin program within the last three years, were more consumptive (fish and game) oriented, stayed at the particular cabin longer, and chartered a boat or plane more often. The family group used the cabin program less, were less consumptive oriented, traveled in smaller parties, and stayed shorter periods of time.

6. Mode of Travel: The nonmechanical traveler (hiker/skier) had used the cabin program more and had more previous experience with the particular cabin than had the motorized visitor. If a person chartered transportation to the cabin, he usually had less experience with the particular cabin, hunted/fished more, and stayed longer.

7. Style of Participation: While most people were attracted to a given location, the basic decision concerning whether to participate is related to the presence of a suitable cabin, assuming that the cabin is in close proximity to attractors, quality scenery, fishing steams, reasonable access, etc. The hunters' opinions differed from the typical cabin user. They were more willing to go where the game was regardless of availability of a cabin. The presence of a cabin apparently simply reinforced the decision to hunt in the particular locale.

Cost of transportation was related to style of participation. Nearly 60 percent of the participants walked or skied into a cabin and, consequently, spent little money on transportation. Those parties were typically families and stayed shorter periods of time. Those who flew or chartered (plane or boat) stayed longer and travelled as groups of friends, as if to ameliorate the higher costs of transportation. This dichotomy is shown in the skewedness of transportation costs (low mode-many hikers and skiers, and high mean-high cost of transportation to many outlying areas). There were higher transportation costs in the Southeast than in the Southcentral, reflecting the greater need for use of plane or boat. Level of participation was shown to be tied to level of income in especially Southcentral, where higher income people were the primary participants. At the same time, their transportation costs were usually less.

No regional crossover of use pattern was noted. The cabin user participated in the same region in which he resided. Further, the data suggests a level of exploring, i.e., visiting cabins where one has not stayed before, yet having some experience in the cabin program in the past three years.

8. Evaluation of Program: The factors related to the enjoyment of the cabin program were the presence of a warm cabin, essential equipment, and good scenery. For some, the presence of fish or game resources was also important. Negative reactions were due to poorly maintained cabin equipment. The equipment rated as necessary were the stove, axe, firewood, windows, and screens.

The overall preferred style of cabin is a closed, rustic log cabin. The A-frame style was also an acceptable choice. The respondents felt no saturation level in terms of too many existing cabins; however, they were nearly split on the desire for more. Those who indicated a need for new cabins often suggested locations outside the boundaries of the two national forests.

While the original goal of the outlying cabin program was to redistribute recreational use and to reduce fishing pressure in some areas, it is clear that it has become a much broader program which now accommodates many nonconsumptive uses including winter activities. Decisions concerning the expansion of the existing program should be made with an awareness of how users have responded to previous cabin locations and of

how the cabin program fits into the overall process of natural resource management. On this latter point, for example, it is the State's role to manage game and fish resources through the establishment of management units, season lengths and bag limits. Future developments in the cabin program, which influence access, can be coordinated with the State's efforts so that the objectives of the fish and game programs have a better chance of being accomplished. With regard to the expansion of the program in areas where consumptive resources are not important, decision makers may first want to restrict such expansion to those areas where there is a continuous over subscription to existing cabins.

IX. ADMINISTRATION, OPERATION, AND MAINTENANCE

The cabin program is administered and maintained by each Ranger District. While administration of the cabin program for the 2.3-million-acre Misty Fjords National Monument Wilderness is handled by the Monument Ranger, actual maintenance is performed by Ketchikan Ranger District personnel for efficiency.

Coordination of cabin reservations is currently handled by the Forest Supervisor's office since four of the five District Ranger offices are still headquartered in the Federal Building. Only the Craig District is located in its entirety, elsewhere. Cabin reservations will be handled by individual Districts as they make their scheduled moves out of the Federal Building. A central coordinator for reservations will continue to be needed. This could either continue to remain with the Forest Supervisor's office or be delegated to the Ketchikan District office.

RIM use information must continue to be monitored and revised to reflect the most accurate data. There still appears to be need for adjustment of operating seasons.

A continued effort of public awareness regarding new cabin opportunities and the reservation process will be required. The local media has been effective in this respect but additional support is needed in the form of a recreation opportunity guide available at each Forest Service office. This system will supplement the present cabin brochure and will assist visitors in selecting areas and activities that meet their needs. Individual maps of local features associated with each cabin are currently available and handed out to the public upon request. Public information and education will continue to be used to further acquaint visitors with the cabin system and its use. The "Pack-It-In Pack-It-Out" program will receive increased emphasis as a means to reduce litter. The present response form will continue in use to help identify maintenance needs. All reservation clerks, trail rangers, and others who work with the public should receive HOST awareness level training at a minimum.

Maintenance is performed by District personnel, YACC, and/or YCC crews under Forest Service direction and the Ketchikan Sportsmen Club through a cooperative agreement. New, individual operation and maintenance plans must be developed with the shift back to Districts in October of 1980. At a minimum, the plans should include: cabin description and location, relationship of cabin to surrounding recreation opportunities, equipment provided, type and schedule of maintenance, maintenance contracts and agreements if applicable, RIM condition class, and a vegetation management prescription.

Management Alternatives

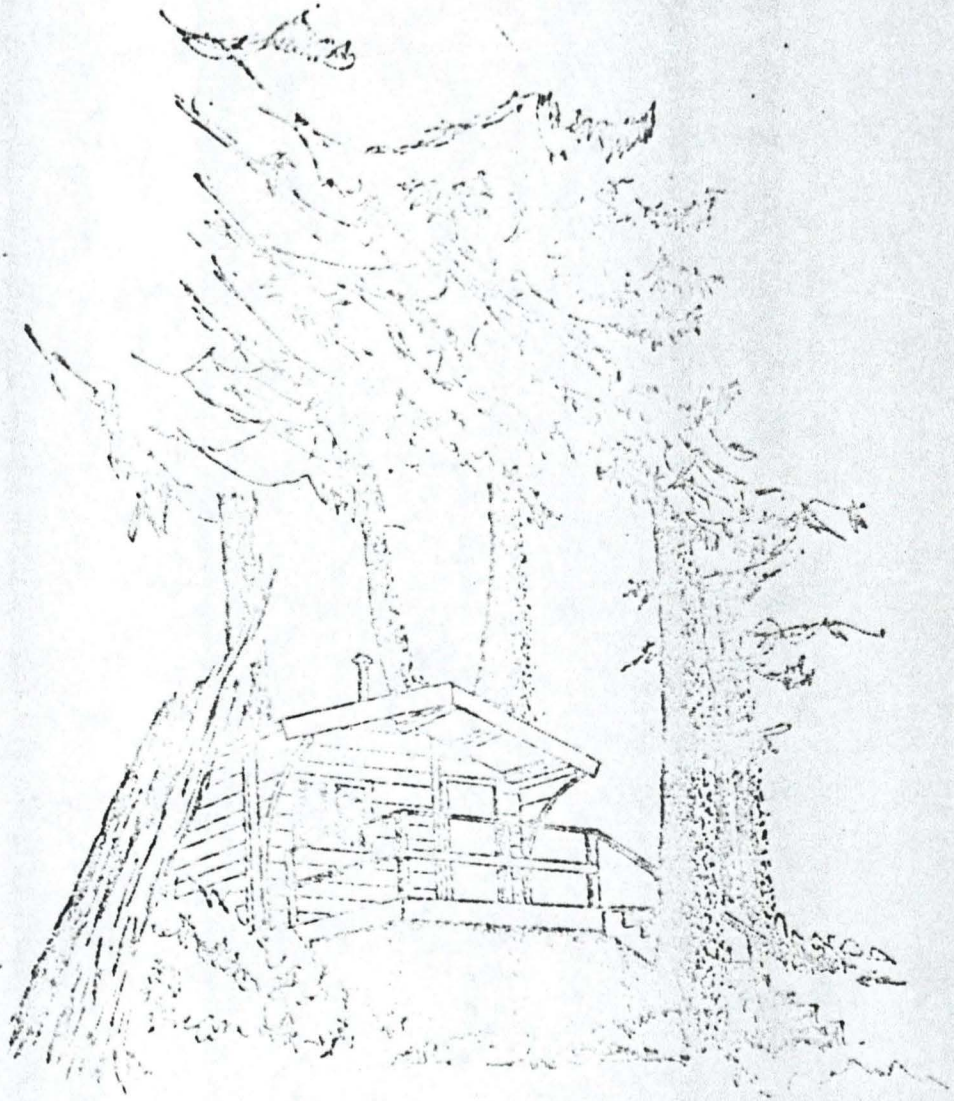
A major maintenance chore continues to be periodic relocation of the pit toilets. Soils are usually shallow to bedrock or have a high water table. Two alternatives are (1) disposable vaults such as 55 gallon fuel drums which could be sealed and lifted out in conjunction with other work or (2) composting which may be considerably cheaper.

A "marine trail" exists around Revilla Island through the use of the U. S. Coast Guard surplus mooring buoys. Two dozen additional buoys have been received and stored on the Ketchikan Ranger District. A portion of these will be used to rotate the existing buoys under a maintenance program. The remaining buoys can be used in conjunction with new saltwater cabins or at anchorages identified under the State of Alaska's marine park proposal.

The public continues to question why the Forest Service doesn't supplement the cabin program with inexpensive three sided shelters such as the CCC Adirondach shelters of the 1930's. These shelters would be used along proposed cross island trails where use would not justify construction of a cabin. Inclement weather and lack of protection from marauding brown bears are two of the most commonly heard drawbacks. Construction of three sided shelters along identified canoe routes and high country trails could be investigated where brown bears are not considered a threat by the average recreation user.

The Pan Abode type construction is well established on the Ketchikan Area as versus the A-frame type cabin. It is highly regarded by the public in terms of cabin style and accommodations. An alternative may be a round log or squared timber structure of similar proportions. Native materials combined with the manpower programs would probably be necessary to make this type structure cost effective since journeyman hourly wages in Alaska preclude extensive hand labor.

Substitution of private enterprise versus Forest Service administration in the cabin program is not considered viable at this time. The more marginally used recreation cabins justify their existence through a very real safety need and the dispersion of sportsmen to lessen the hunting and fishing pressure in more accessible or desirable localities. Revenues would have to be sizably increased and, combined with already high fly-in costs, would preclude the low and moderate income recreationist and his family. Private enterprise regulating cabin use in the wilderness areas could also possibly create conflicts. The objective of the private sector is understandably revenue while the wilderness manager must consider carrying capacity in terms of solitude. This has been considered in the Alaska Lands legislature with the specific exclusion of additional resorts in the new wildernesses.



WHERE
HOW MANY
WHEN
?

X. IMPLEMENTATION

The preceeding information is a synopsis of how the recreation cabin program is structured, program statistics, current use research, and basic assumptions.

The last step in moving this plan into its final stage is to establish cabin construction priorities. This necessitates acceptance of the inventory criteria, identification of sites and final ranking. Recent passage of the Alaska lands legislation has aided in this process since land status has been solidified and cabins are legislated into the wilderness.

Inventory Criteria

Approximately 55 percent of the Ketchikan Area is now in formal Wilderness (LUD I) or Dispersed Recreation (LUD II). These areas should present the highest opportunity for new cabin sites since the criteria used to establish the land use designations was heavily weighted by the inventoried recreational values.

Priority for site selection when viewing the four land use categories is as follows:

1. Wilderness Areas (LUD I).
2. Dispersed Recreation Management Areas (LUD II).
3. LUD III Area where timber harvesting will not be conducted for the next 10-15 years.
4. LUD IV Areas where (1) commercial timber harvesting and recreational use associated with cabin construction will not be in conflict, i.e., adjacent timber stands nonexistent, marginal, or unregulated due to inaccessibility or economics or (2) reforested stands are 30 years or older and commercial clearcutting will not take place for a minimum of 25 years (aproximate life of cabin).

Criteria for cabin selection within a particular LUD may be further defined:

5. Public safety will override all other priorities such as highest use. An example would be heavy kayak use surrounding the Coronation Island Wilderness which probably would not be our highest priority based on total amount of use.

6. Replacement of deteriorated recreation cabins on the reservation system will be higher priority than construction adjacent to a lake or saltwater bay where no cabin previously existed.

7. Saltwater cabins and lake cabins relatively close to population centers with air charter services will be of higher priority than isolated, fly-in lakes.

8. Saltwater cabins with good anchorages able to support a low maintenance mooring buoy are higher priority than deep water anchorages where ice movement necessitates periodic relocation of the mooring buoy.

9. Cabin sites accessible by foot trail from saltwater or road systems are higher priority than fly-in only sites.

10. New walk-in cabin sites should be a minimum of five miles from the closest "open to public" road system.

Site specific cabin location criteria is contained within the Ketchikan Area's "Recreational Cabin Construction Handbook" published 1979. This handbook categories specific site selection into the major headings of (1.1) access, (1.2) freshwater supply, (1.3) drainage, (1.4) orientation, (1.5) slope, (1.6) view, (1.7) wood supply, and (1.8) recreational opportunities. This booklet should be consulted in the physical selection of a site once the general locality has been determined (See Appendix).

Optimum user capacity should be established for lakes already having facilities before additional sites are proposed. This could be in the form of a questionnaire mailed out with the cabin reservation in conjunction with the heaviest used cabins.

Action Plan

1. Draft "Recreation Cabin Site Construction Analysis" forwarded to Districts and Monument for their review.

2. Review will include acknowledgement or suggested revisions to cabin inventory criteria (District responsibility).

3. Once criteria is agreed upon, Districts will submit their cabin site nominations by priority.

4. Sites will be integrated into one priority (SO - District mutual responsibility).

5. Sites will be reflected in next TLUMP revision, and locations identified in the respective management area plans.

6. A short, site specific environmental analysis will be completed for those locations proposed for construction within the next fiscal budget planning year.

7. A plane table site survey will be accomplished and the final site plan approved by the Forest Supervisor.

8. Cabin construction costs by priority will then be entered in the same fiscal budget planning year as in item 6.

9. Cabin construction in the interim will be based upon the existing Environmental Statement for "Construction and Operation of Forest Service Recreation Cabins in Roadless Areas". (See Appendix)

The cabin plan, once finalized, should be reviewed on a yearly basis and supplemented as needed. The priority list should be reviewed to determine if recreation patterns have shifted due to trends or economics.

REFERENCES

Alves, William. 1980. Residents and Resources: Findings of the Alaska Pubic Survey on the Importance of Natural Resources to the Quality of Life in Southeast Alaska. Institute of Social and Economic Research, University of Alaska for USDA Forest Service, Alaska Region.

Jubenville, Alan; William G. Workman; and Wayne C. Thomas. 1979. Participation, Preferences, and Characteristics of Outlying Cabin Users in Alaska National Forests. Draft copy of Bulletin 57, Agricultural Experiment Station, Univeristy of Alaska, Fairbanks, Alaska.

Cabin Plan for Chugach National Forest. 1979. Draft. Jim Tallerico, USDA, Forest Service, Alaska Region, Chugach N.F.

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How Should Alaska's Federal Recreational lands be developed? Views of Alaska's Residents and Visitors. 1979. A report by the Comptroller General of the United States. U. S. General Accounting Office.

National Demand for Developed Recreation and Tourism in Southeast Alaska - An Overview. 1978. Institute of Social and Economic Research, University of Alaska for USDA Forest Service, Alaska Region.

Southeast Alaska Area Guide. 1979. USDA Forest Service, Alaska Region.

The LPK Timber Sale Plan for 1979 - 84 Environmental Statement. 1979. USDA, Forest Service, Alaska Region, Ketchikan Area.

Tongass Land Use Management Plan Environmental Statement. 1979. USDA Forest Service, Alaska Region, Ketchikan Area.

APPENDIX

Construction and Operation of Forest Service Recreation Cabins in Roadless Areas Environmental Statement. 1974. USDA Forest Service, Alaska Region, Ketchikan Area.

Recreational Cabin Construction Handbook. 1979. USDA Forest Service, R-10, Tongass National Forest, Ketchikan Area.

Recreational Facilities: Tongass National Forest, Ketchikan Area. 1980. USDA Forest Service, Ketchikan Area.

Tongass National Forest map. Revised 1976. USDA Forest Service, Alaska Region.

APPLICATION FOR RECREATION CABIN PERMIT

Permits for use of recreation cabins in the National Forests of Alaska are issued on a "first-come, first-served" basis. Permits may be obtained in person or by mail. Your signature on the maintenance agreement below will allow us to use the permit fee to maintain cabins. Return the apolication and signed agreement with your payment and a permit will be issued. If a cabin is not available, your money will be returned. Reservations may be made up to 6 months in advance.

Please read

The rate for occupancy is shown below. Please make check or Postal Money Order payable to USDA-Forest Service. Refunds: To be eligible for a refund, you must request it in writing at least ten (10) days before your scheduled use of the cabin. The original permit must accompany the request.

Name_____ Mailing Address_____

Number in party_____ _____

CABIN DESIRED	DATES DESIRED
1st choice _____	_____to_____
	alternate dates?
2nd choice_____	_____to_____
3rd choice_____	_____to_____

May we substitute another cabin if all your choices are unavailable?_____

Small skiffs are provided at some cabins. Coast Guard regulations require that a Coast Guard approved flotation device be on board for each passenger. It is up to the users to provide flotation devices.

MAINTENANCE AGREEMENT

Recreation Cabin Permits are issued under the Granger-Thye Act whereby the permittee is required to assist in cabin maintenance. The fee and maintenance costs for this use are computed at $____per night.

The permittee hereby requests and the Forest Service agrees to perform cabin maintenance under the Act of April 24, 1950 (16 U.S.C.572) to the limit of deposited funds.

Date_____Signature of Permittee_____

Amount Enclosed_____for_____night(s).

_____
Forest Officer

Permit Issued_____
No.

THIS IS NOT A PERMIT

R10-2300-21 (10/75)

U.S.D.A. FOREST SERVICE
ENVIRONMENTAL STATEMENT

Construction and Operation of Forest Service Recreation Cabins in Roadless Areas

U.S.D.A. FOREST SERVICE ENVIRONMENTAL STATEMENT

CONSTRUCTION AND OPERATION OF FOREST SERVICE RECREATION CABINS IN ROADLESS AREAS

Prepared in accordance with Section 102(2) (C) of P.L. 91-190

Summary Sheet

I. Draft ( ) Final (X)

II. Name of USDA Agency: Forest Service

III. Administrative (X) Legislative ( )

IV. Brief Description of the Action

The Ketchikan Area, Tongass National Forest, has proposed the construction and operation of seven recreation cabins on saltwater in roadless areas in the Ketchikan Area, Tongass National Forest, located around Revillagigedo Island for public use. The cabins will primarily serve the boating public and will provide them with a warm shelter during both normal and emergency boating conditions.

Five of the proposed cabins are within the boundaries of the Ketchikan Gateway Borough. They are the Alava Bay, Portage Cove, Grace Creek, Long Lake, and Blind Pass cabins.

V. Summary of Environmental Impacts and Adverse Environmental Effects

The environmental impact on the areas will be small. The principal impact will be the installation of the one-room cabins in areas where no permanent structures have previously been established. The cutting and clearing of brush and trees will be necessary on approximately one-sixteenth-acre for each cabin.

Smoke from wood burning stoves will occur during most occupancies of the sites. Some pollution will result from human use of these cabin sites. An increase in fire risk for these roadless areas will result from additional use of the uplands.

VI. Alternatives Considered for the Seven Cabins

Three alternatives are considered:

1. Inclusion of subject areas into the Wilderness System.
2. No action - build no cabins at all.
3. Construct cabins at other locations.

VII. List of Federal, State, Local Agencies, and Others from Which Comments Have Been Received

Federal

Environmental Protection Agency
Department of Interior
Department of Housing and Urban Development
Department of Transportation

State

Alaska State Clearing House
University of Alaska

Local

Ketchikan Gateway Borough
Alaska Loggers Association
Southeast Alaska Mountaineering Association

Others

Dixie M. Baade

VIII. Date Draft Environmental Statement was Made Available for CEQ and the Public

September 18, 1973.

Date Final Statement was made available for CEQ and the public:

APR 18 1974

U.S.D.A. FOREST SERVICE ENVIRONMENTAL STATEMENT

CONSTRUCTION AND OPERATION OF FOREST SERVICE RECREATION CABINS IN ROADLESS AREAS

Prepared in Accordance with Section 102 (2) (C) of P.L. 91-190

Type of Statement: Final

Date of Transmission to CEQ: APR 18 1974

Type of Action: Administrative

Responsible Official: Richard M. Wilson
Forest Supervisor, Ketchikan Area
P. O. Box 2278
Ketchikan, Alaska 99901

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VII. Irreversible and Irretrievable Commitments of Resources

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APPENDIX

DESCRIPTION

Proposed Action.

The Ketchikan Area, Tongass National Forest, has proposed the construction and operation of recreation cabins near saltwater within inventoried 5000-acre roadless areas. Seven cabins are planned for construction near waters around Revillagigedo Island.

The project includes the construction of seven 12' x 14' Pan Abode cabins similar in design to those shown in the appendix.

The sites selected for cabins are located at: (1) Alava Bay, (2) Grace Creek, (3) Portage Cove, (4) Saks Cove, (5) Anchor Pass, (6) Long Lake trail terminus at tidewater, and (7) Blind Pass. The attached map shows the locations.

Reason for Environmental Statement. The Forest Service policy is to prepare and process environmental statements for any development within any roadless or undeveloped area over 5,000 acres in size.

The roadless areas on Revillagigedo Island include most of the land area between Thorne Arm and East Behm Canal and from East Behm Canal to Hassler Island located off the northwest corner of Revillagigedo. The coastal areas from Hassler Island to Naha Bay are developed, as is the area adjacent to Ketchikan because of existing road systems. See the attached map. The small developed areas located in the East Behm Canal country near Ella Creek and Saks Cove were harvested for timber.

The small private tract at the mouth of the Chickamin River has been developed into a combination private home and resort area. Road access from Ketchikan is limited to an area about 15 miles north and south of the city. The remainder of Revillagigedo Island is only accessible by boat, float plane, or helicopter.

Climate. The Ketchikan Area has a maritime climate with an average annual mean temperature of 46° F. 1/ Rainfall is abundant, generally exceeding 100 inches per year. 1/ Major storms, accompanied by heavy rains and strong winds, come out of the southeast. Winds from the north often bring fair weather and sunshine. The heaviest precipitation generally occurs in the early fall and the lightest in mid-summer. May, June, July, and August are considered to be the more favorable boating months of the year.

1/ Potential Evapotranspiration and Climate in Alaska by Thornthwaite's Classification, J. H. Patric, P. E. Block, USDA Forest Service Research Paper PNW-71, Institute of Northern Forestry, Juneau, Alaska, 1968

Area Population and Recreation Resource. Ketchikan, with an area population of 11,717 is situated on the southwest side of Revillagigedo Island some 660 air miles northwest of Seattle. 1/ Revillagigedo Island is separated from the mainland of the North American continent by a waterway called Behm Canal. It averages two miles in width. The distance around the island is 149 miles by water. The mainland and Revillagigedo Island have many rivers, valleys, bays, and inlets carved by glacial action. Two of the most spectacular areas, Rudyerd Bay and Walker Cove, offer the visitor an awe-inspiring scenic experience. These two areas have been included in the Granite Fiords Wilderness Study Area and are a part of the existing Rudyerd Bay - Walker Cove Scenic Area. See the attached Granite Fiords Wilderness Study Area brochure, for description and location.

The Granite Fiords Wilderness Study Area is one of three areas on the southeast Alaska mainland of the Tongass Forest proposed by the Forest Service for inclusion into the Wilderness system. The other two areas are Tracey Arm - Fords Terror between Petersburg and Juneau, and Russell Fiord near Yakutat. Two local organizations, the Tongass Conservation Society and the Southeast Alaska Mountaineering Association, have both asked for additional acreage extending the Granite Fiords Wilderness Study Area boundaries to the Klahini River on the north and to Marten River on the south. Their east-west boundaries remained the same as those proposed by the Forest Service. In addition, both TCS and SEAMA recommend that the east side of Revillagigedo Island be classified as a roadless scenic area. The Forest Service will maintain the land on both sides of Behm Canal as a high quality scenic resource and encourage safe public use in an environment that affords a near natural level of experience. 2/

Ketchikan residents are water oriented and boating is a way of life in Southeast Alaska. There are over 2000 boats in the Ketchikan area. 3/ In 1972, over 2,200 hunting and fishing licenses were sold to local area residents. 4/

1/ 1970 Alaska Population and Workforce, Alaska Department of Labor, Box 3-7000, Juneau, Alaska.

2/ South Tongass National Forest Public Involvement Management Proposals, U.S. Forest Service, Ketchikan Area, Box 2278, Ketchikan, Alaska, January 1972.

3/ From information received from the Department of Transportation, U.S. Coast Guard Commander, 17th Coast Guard District, Juneau, Alaska, January 1973.

4/ From information received from the Alaska Department of Fish and Game, 2414 Tongass Avenue, Ketchikan, Alaska, November 1972.

The two resorts at Bell Island and Yes Bay, located adjacent to the north end of Revillagigedo Island, are 44 miles from Ketchikan by way of West Behm Canal and 96 miles by traveling on East Behm Canal. Two smaller resorts exist near saltwater on the Unuk and Chickamin Rivers. There are few cabins or shelters located in the Behm Canal area that would provide shelter from the weather for operators of small boats if sudden storms appear or engine trouble develops.

There are 52 Forest Service cabins located on the Ketchikan Area of the Tongass National Forest; 41 are near freshwater lakes accessible by float plane or trail and 11 are adjacent to saltwater. The cabins proposed in this project will provide a system of shelters around Revillagigedo Island. This system is not likely to compete with the freshwater cabins.

Land Status. All of the proposed cabin sites are on National Forest land. The sites are not within classified Wilderness or Wilderness Study areas or Native Land Claim Areas.

Cabin Environment and Use. The cabins will be located adjacent to saltwater beaches having gentle to moderate slopes with an overstory of western red cedar, Alaska yellow cedar, western hemlock, and/or Sitka spruce. Devils club, red huckleberries, blueberries, bunchberries, salmonberries, skunk cabbage, and grasses are often found in the understory. Black bear, wolves, deer, waterfowl, seal, salt and freshwater fishes, and furbearing animals such as marten, mink, otter, and squirrels are commonly found at or near these sites.

The cabins will be available for year-round use with a charge fee of five dollars per day per party. Maximum stay is limited to 10 days between November 1 and March 31, and seven days during the rest of the year. The cabins will also be available in emergency situations. As far as practical, split firewood will be maintained at each cabin. A minimum of one cord of wood per year is required for the wood burning stoves. Enough available fuel exists at each site for a minimum period of 20 years.

Garbage is to be burned or hauled from the area, and pit toilets will be installed a minimum distance of 100 feet from lakes, streams, or ocean to comply with State and Federal pollution standards. There will be no garbage pits at the cabin locations. Users will be encouraged to burn as much of their refuse as possible in the cabin stoves and take all non-burnable garbage with them as they leave the site. Metallic and glass residue will be regarded as non-burnable refuse. The Forest Service will make periodic checks of the cabins annually, removing all left over garbage from the site.

Public Involvement. During 1971 and 1972, numerous public involvement meetings were held by this Forest in revising its Land Use Plan. One of the suggestions received was for a series of shelter cabins and anchor buoys around Revillagigedo Island to serve the small boat recreationist for both safety and convenience. A tentative list of cabin sites was developed through informal contacts with members of the Alaska Sports and Wildlife Club, Alaska Department of Fish and Game, and individual small boating enthusiasts. On July 25, 1972, a public meeting was held in Ketchikan to involve the public in the final selection of sites and setting of priorities for installation. The sites selected and priorities for installation were then revised to include those shown in this environmental statement.

Construction of the cabins will be a cooperative project between the Ketchikan Area, Tongass National Forest, and the Alaska Sports and Wildlife Club.

II. ENVIRONMENTAL IMPACTS

The anticipated impact on the environment will be minimal. Access to each site will come from the beach. No roads or other improvements are part of this project. Heavy equipment such as dozers, trucks, or cranes will not be utilized during or after cabin construction.

A. Air: During construction, the exhaust from small gasoline engine driven chainsaws, winches, and small power tools will have little effect on air quality. After construction, smoke from the wood burning stoves is expected, but again this will have an insignificant effect on the environment.

B. Natural Beauty: There will be the physical introduction of the cabins in selected coves where development does not now exist. In addition to the cabins, there will be an outdoor privy, several signs, and an attached woodshed built at each location, plus an anchor buoy in the bay. All wooden structures will be stained brown, and roofing will be colored green to harmonize with the surrounding vegetation as much as possible. The cabin will be placed as close to the ground level as good construction principles will allow to avoid "the built-on piling effect". Most of the developments will not be visible from the main water travel route.

C. Outdoor Recreation The cabins are not expected to increase the total use of this area by more than 3,500 visitor days/year. The cabins will encourage the public to visit East Behm Canal country more than is the case now because the safety margin for small boat travel will be enhanced by a system of cabins for public use. These cabins will also be available to the float plane and helicopter traveler.

D. Range: Wolves and deer utilize beach fringe during the winter months; however, the size of the areas involved compared to the total available beach fringe is a minute fraction of the total winter range, and human use is expected to remain low in the winter months.

E. Soils: The soils on these sites are typical of most forested beach soils of southeast Alaska, having soft organic surface layers over gravelly substrata rich in humas. Revegetation is rapid after tree and brush removal. Some soil compaction by campers is expected, but this will be limited to paths and walkways.

F. Timber: About one-sixteenth of an acre of brush will be cut and burned at each site to allow cabin construction. Hazard trees adjacent to the cabin will be utilized for firewood. Wood cutting will be one of the largest impacts on the sites. For this reason, all trees will be marked by the Forest Service prior to cutting to insure controlled cutting in selected areas adjacent to each site.

G. Water: A slight increase in pollution will result from human occupation of these cabin sites. However, this will be insignificant because sewage facilities will be constructed to meet State and Federal pollution control standards. Risk from petroleum spills will increase for Behm Canal, but it should remain the same for the entire Ketchikan area if boating is more evenly distributed rather than increased as a result of the project.

H. Wilderness: The cabins should not have a permanent effect in committing roadless areas to developed areas. The cabins could be removed if the areas involved ever were needed for Wilderness purposes with little evidence remaining of the occupancy. People use at these cabins and their use of surrounding resources will be less than that experienced at popular tent camps at established Wilderness in the "South 48".

I. Wildlife: Areas adjacent to the cabins will receive slightly heavier hunting and fishing pressure than previously. However, information gained from experience has shown that these pressures do not materially affect fish or game populations. The hunter cabin program has been evaluated to determine its effectiveness as a game control device. It was found to be unsuccessful and did not materially affect game populations on the Tongass National Forest.

J. Fire: Fire risk will increase by encouraging the boater to use these land facilities. The degree or risk is considered small when compared to the present fire record established by cabin uses. No forest fires have been attributed to cabin occupancy.

K. Insect and Disease: No effect.

L. Land Ownership Adjustments: None necessary.

M. Transportation: No roads are planned adjacent to these cabin locations. Several trails do exist and traffic will increase on the Long Lake and Grace Creek trails. In general, this impact will be too small to warrant increased maintenance or new trail construction.

N. Land Use: No other use is being made of these cabin sites at the present time.

O. Information and Education: Establishment of these cabins will contribute to the exploration and knowledge of this area by the general public.

P. Historical and Archeological: The most recent addition to the National Register of Historic Places was checked and it was determined that National Register sites or areas are not affected. In addition, on site inspections of each of the proposed locations did not reveal any apparent historical or acheological characteristics that would nominate them to the National Register.

Q. Social and Cultural: Installation of a series of cabins along Behm Canal will encourage more land visits in an area where man seldom visits and rarely stays for more than a few hours. The opportunity to explore and commune with nature in this area may well increase a person's appreciation for this type of experience.

R. Economics: Sales of outboard fuel, camping supplies, and fishing and hunting gear will not increase substantially. Since the cabins have a low initial cost and construction will be by volunteer labor, the economic impact on the community will be negligible.

III. FAVORABLE ENVIRONMENTAL EFFECTS

A. The cabins will serve as a convenient base from which to hunt, fish, hike, sightsee, explore, beachcomb, or gather forest products.

A warm dry cabin will also provide relief during inclement weather. Should incidents arise such as engine trouble or severe storms, the cabins will be available for use in emergency situations.

B. The cabins will have favorable effects on the more congested areas of the Forest by dispersing concentration of recreation users to more remote areas of Revillagigedo Island. The project will disperse hunting pressures to areas where there is practically no hunting now. Saltwater fishing will also increase for the area between Point Alava and Marguerita Bay. Impacts on fish and wildlife populations can be manipulated through regulated season and bag limits through coordination with the Alaska Department of Fish and Game, should this become necessary.

C. Presently, camping does occur in areas without facilities along the shores of Revillagigedo Island and the mainland. By providing cabins, more control will be gained by centralizing use and thereby controlling the adverse effects of the public's use.

IV. ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

A. Perhaps the greatest impact will be cabin development and use in an otherwise undeveloped country.

B. The cutting of brush and trees for clearing and wood supply.

C. Smoke and noise pollution will occur during construction on each site. There will be smoke from the wood-burning stove during most occupancies of the sites.

D. A slight increase in fire risk for the East Behm Canal will result from additional use of the area. However, over a decade of cabin use on the Forest has not resulted in any fires attributed to cabin occupancy.

E. Some pollution will result from human use of these cabin sites. Public use with limited supervision will create some littering and other pollution. The user will be encouraged to clean up and pack out his own trash and the Forest Service will periodically clean up near the cabin sites.

F. There will be little or no effect on the estuaries because the total public use in any one period will be small. Since the cabins can only accommodate six persons comfortably, total public use is not expected to exceed over 300 visits annually at each site. Past experience has shown our recreation cabins generally do not receive more than 200 visits and rarely 500 visitor days use each year.

V. ALTERNATIVES TO THE PROPOSED ACTION

Alternate I - Include areas into Wilderness System

The Alaskan Region of the Forest Service conducted a study of all roadless and undeveloped areas within the Region in an effort to identify specific candidate areas for possible inclusion in the Wilderness System. The Behm Canal area, including these cabin sites, was considered. All roadless and undeveloped areas in the Alaska Region were also considered in a Roadless and Undeveloped Area Study conducted by the Chief of the Forest Service. Environmental statements were prepared and processed at the National level. The final statement was issued on 10/19/73. The Behm Canal area was not recommended as a Wilderness Study area.

Alternate II - No action - build no cabins at all

Visitor use would continue as now with visits limited to the warmer and drier months of May, June, July, and August. The majority of this use would come from larger boats with eating and sleeping accommodations.

Alternate III - Construct cabins at other locations

At public involvement sessions it was agreed to give priority to establishing a system of shelter cabins around Revillagigedo Island for the safety and convenience of the small boater. The Forest Service has studied the area surrounding Revillagigedo Island and based the selection of sites in conjunction with the following guidelines:

A. Interested organizations and individuals contributed to the selection of these sites through the Forest Service-sponsored public involvement session held on July 25, 1972. (See appendix) All of the sites listed in the appendix were considered for possible cabin locations, but the first priority went to sites located adjacent to Revillagigedo Island to establish a system of cabins around that island. A large segment of the mainland on the east side of the canal is being considered for inclusion into the Granite Fiords Wilderness Study Area. Locations in developed areas such as Shrimp Bay and Neets Bay have been seriously considered for future cabin sites.

B. Cabin locations had to be suitable for construction, providing enough level or near level ground to accommodate the cabin and support facilities such as the woodshed and toilet. The cabin also had to be accessible from the beach. A nearby freshwater supply for drinking and cooking was considered to be an essential item in choosing a cabin location. Also proper pit toilet drainage patterns had to be considered and swampy areas avoided.

C. Another factor considered was the suitability of anchorages which included the depth of water at all tide levels, shelter from wind and heavy seas, and the degree of potential icing during the winter months. For instance, a long narrow inlet with numerous freshwater streams flowing into it was not as desirable as a short, wide-mouth bay.

D. The proximity to other recreation facilities and opportunities was also a criterion. Hiking, fresh and saltwater fishing, hunting, beachcombing, viewing scenery, and gathering forest products are some of the activities that could be associated with the saltwater cabins. Although all of the sites selected did not have every one of these outdoor activities associated with it, each site had at least one, and in most cases, several.

VI. RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE OF LONG-TERM PRODUCTIVITY

The proposed use is minor in scope and will have minimal impacts on the land. It will have very little effect on maintaining long-term productivity. Should a greater need arise than cabin use in any one of these locations, the entire structure can be removed and the site restored to a near-natural condition.

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The public will make greater use of undeveloped areas, thus reducing the levels of solitude and isolation.

VIII. CONSULTATION WITH OTHERS

A. A public involvement session was held on July 25, 1972, to discuss, among other things, proposed cabin locations. The Alaska Sports and Wildlife Club and the Alaska Department of Fish and Game have been helpful in suggesting areas for both future cabins and mooring buoys along the water routes surrounding Revillagigedo Island.

The public has supported the Forest Service recreation cabin system on the Tongass National Forest, Ketchikan Area, in public involvement sessions held during the past two years.

B. Following is a list of agencies and groups to whom the Draft Environmental Statement was sent:

U.S. Department of Interior, Washington, D.C.
Department of the Army (Corps of Engineers), Washington, D.C.
Environmental Protection Agency, Seattle, Washington
National Marine Fisheries Service, Juneau, Alaska
National Oceanic and Atmospheric Administration, Washington, D.C.
U.S. Department of Housing and Urban Development, Washington, D.C.
Federal Highway Administration, Portland, Oregon
U.S. Department of Commerce, Washington, D.C.
U.S. Coast Guard, Juneau, Alaska
Alaska Clearing House, Juneau, Alaska
- Department of Fish and Game, Juneau, Alaska
- Department of Economic Development, Juneau, Alaska
- Department of Natural Resources, Juneau, Alaska
- Department of Labor, Juneau, Alaska
- Department of Revenue, Juneau, Alaska
- Department of Environmental Conservation, Juneau, Alaska

Alaska Chamber of Commerce, Juneau, Alaska
Cooperative Extension Service, Fairbanks, Alaska
Ketchikan Vessel Owners Association, Ketchikan, Alaska
Sierra Club, Juneau and Anchorage, Alaska

Territorial Sportsmen, Inc., Juneau, Alaska
Alaska Loggers Association, Ketchikan, Alaska
Southeast Alaska Mountaineering Association, Ketchikan, Alaska
Tongass Conservation Society, Ketchikan, Alaska
Gateway Borough, Ketchikan, Alaska
Gateway Borough Planning Department, Ketchikan, Alaska
Alaska Sports and Wildlife Club, Ketchikan, Alaska
Western Forest Industries Association, Portland, Oregon
Arctic Representative Friends of the Earth Fairbanks, Alaska
Ketchikan Public Library, Ketchikan, Alaska
Gillnetter's Association, Ketchikan, Alaska
Seiner's Association, Ketchikan, Alaska
Federation of Western Outdoor Clubs, Seattle, Washington
Western Federation of Outdoor Clubs, Auke Bay, Alaska
Ketchikan Community College, Ketchikan, Alaska
New Alaskan, Ketchikan, Alaska
Senator Robert H. Zeigler, Ketchikan, Alaska
Representative Oral Freeman, Ketchikan, Alaska
Representative Terry Gardiner, Ketchikan, Alaska
Yes Bay Lodge, Yes Bay, Alaska
Henry Aegerter, Ketchikan, Alaska
Ketchikan Daily News, Ketchikan, Alaska
Bell Island Hot Springs, Ketchikan, Alaska
Ketchikan Yacht Club, Ketchikan, Alaska
Southeast Alaska Airmen's Association, Ketchikan, Alaska
Coast Air, Inc., Ketchikan, Alaska
Greater Ketchikan Chamber of Commerce, Ketchikan, Alaska
Alaska State Troopers, Ketchikan, Alaska
Federal-State Land Use Planning Commission, Anchorage, Alaska
Sealaska, Juneau, Alaska
Bureau of Sport Fisheries and Wildlife, Ketchikan, Alaska
U.S. Coast Guard Base, Ketchikan, Alaska
Alaska Visitor's Association, Anchorage Alaska
Polaris Material Office, Charleston, South Carolina
Sierra Club Legal Defense Fund, Inc. San Francisco, California
Natural Resources Defense Council, Inc., Palo Alto, California
Alaska Department of Highways, Juneau, Alaska
Division of State Lands, Salem, Oregon
Mick Stevens, Ketchikan, Alaska
M. Rupert Cutler, East Lansing, Michigan
H. Paul Friesema, Evanston, Illinois
David Walsh, Englewood, California

IX. COMMENTS OF THOSE RESPONDING TO DRAFT ENVIRONMENTAL STATEMENT AND REPLIES

The following comments were received from the various agencies listed above plus individuals who requested copies as a result of the notice published in the Ketchikan Daily News on October 8, 1973, and the Federal Register.

A. Federal Agencies

1. Environmental Protection Agency

EPA classified the statement as LO-1 (Lack of Objections - adequate)

2. Department of Housing and Urban Development

The office of Community Planning and Management in Region X has no objection to the project.

3. Department of Transportation

The office of Environment and Design in this Department reviewed the draft and reported there were no areas of concern with highway related transportation facilities.

4. Department of Interior

a. Recommends more detail, particularly in the discussion of impacts.

Sections of the draft have been expanded to incorporate more detail.

b. Noted that no mention is made of the proximity of the proposed cabins to eagle nesting trees.

Each site was surveyed on the ground. In addition, several low level flights provided excellent aerial observation of the proposed cabin locations and surrounding area. No eagle nesting trees were observed within a 1000 foot radius of the proposed sites.

c. Mentions that garbage service will be infrequent and that accumulated garbage spoils the aesthetics of an area and also attract bears that could prove to be a nuisance or danger to visitors.

Sections I and IV-E discuss the garbage problem and the approach to the solution. It is true that of the existing 52 recreation cabins located within the Ketchikan Area, some bear related problems do occur. However, these rare occurences have been chiefly confined to the mainland cabins. The present approach to cabin cleanup as described in the draft should reduce the probability of these problems arising. Wildlife encounters are anticipated and contribute to the total recreation experience.

d. Observed that if the cabins are as well hidden as planned to harmonize with the surrounding terrain, they may be difficult to locate.

Beach markers will be used if the cabin is not easy to locate from saltwater.

e. Suggests the 2000 visitor days of use figure is too low.

The final statement has been corrected to 3,500 visitor days. This figure is more in harmony with Section IV-F. The average visitor use in 1972 for the 42 cabins located on the east side of Prince of Wales Island, Revillagigedo Island, and the mainland was 326 visitor days. The four existing saltwater cabins, as shown on the map in the appendix, averaged 444 visitor days of use in calendar year 1972. Since the initial cabins were built at the closer and most attractive locations, it is assumed that the average proposed site will receive less use. Some of the proposed sites, such as Saks Cove, have a major value for shelter from rough seas and are expected to receive relatively small reserved use. The 3,500 visitor days is not likely to be reached in the decade ahead.

f. Questions item III-A. which identifies cabin convenience and emergency use of the facilities as favorable environmental impacts.

We have interpreted environment to mean all that surrounds and affects the individual, including safety and convenience features.

g. States that implementation of the project may, instead of distributing visitor use, will actually encourage use that will result in a greater impact than a "no action" alternative.

We believe the increase in boating and boat ownership is due principally to the boating opportunities in the Ketchikan area. We further assume that construction of the cabins

will have a negligible effect of increasing use, but rather in the long-run distribute existing use occurring in the waters around Revillagigedo Island. However, there is a possibility the project will increase use; this remains to be demonstrated. Current use is largely restricted to owners of boats 14 feet and larger, and not charter craft which furnish accommodations. Tourists seldom have boats capable of reaching these areas and rental craft are not normally made available to the inexperienced. Hence, use of these outlying cabins is predicted to be by local boat owners and their friends. The cabins will tend to distribute this use but not significantly increase it.

B. Alaska State Agencies. Six of eight agencies responded.

The Department of Natural Resources made two suggestions.

1. Recommends we point out the number of users and cabins that would make a significant impact on the area.

Section IX-A4e explains our present use and forecast for the seventies. It should also be pointed out that the theoretical capacity of a cabin site exceeds 2000 visitor days each year. The Naha River cabin and adjacent area receives some 2000 visits annually and has continued to receive high use for some ten years now without causing significant harm to the site. At the present time, our planning will limit one cabin to each of the indicated locations in the statement. We believe the site can accept the theoretical carrying capacity of the cabin without causing a significant impact on the area. However, impact is a matter of opinion and cannot be quantified. An isolated cabin, even when unoccupied, may be a significant impact to some people.

2. Recommends propane stoves be encouraged. Questions the cutting of trees for additional wood.

Oil stoves were considered in place of wood stoves, but an abundant supply of wood at each of the sites made it more prudent to choose the wood at least for the present time. It should be mentioned that many of our cabin users do take in small portable gasoline or propane stoves. For further comments, see Section IX-D1d.

3. The Ketchikan Gateway Borough raised several questions:

a. Why was the built-on-piling effect considered negative in Section II-B?

We have found when a cabin is built three or more feet off the ground on piling or posts, it does not harmonize with its

surroundings as well as one constructed directly on the ground. The visible piling or skirting tends to distort the overall appearance of the structure. For this reason, it is more desirable to locate the cabin on level or near level terrain and avoid propping up one end of the cabin to make it fit a particular site. We do not plan on making major modifications in the existing topography.

b. Questions whether or not recreation users will be dispersed as indicated in the statement or will the project, in fact, promote more use. Also wonders if the seven cabins will keep pace with the demand.

Both of these questions are answered in Section IX-A4e&g.

c. States that the roadless area map found in the appendix is difficult to interpret.

We concur and have substituted a new map in the final statement.

d. Feels the recreation cabins are oriented toward select groups. Suggests that there are other pressing needs closer to Ketchikan such as more and better trails.

We explained in the main text that boating is a way of life with Ketchikanites who own over 2000 boats. Section IX-C3 explains why monies cannot be used outside of their assigned function. It should be noted a major portion of the labor required to maintain and expand the cabin system is voluntary manpower provided by the Alaska Sports and Wildlife Club.

A great deal of the land adjacent to the Ketchikan road system has already been eliminated from the National Forests and additional eliminations are proposed under the Alaska Statehood Act and Alaska Native Claims Settlement Act. Trails to recreation attractions on these lands will be the responsibility of the receiving agency.

C. Other Organizations

1. Alaska Loggers Association, Inc

Urges the Forest Service to use the available money and manpower to prepare timber sales rather than construct recreation cabins at least until the demands of industry are met.

The Ketchikan Area has already sold all of the timber than can be harvested for the FY 1966 - 1975 ten-year period under sustained yield principle. It has also sold a normal amount of its allowable

cut to provide for initial development in the FY 1976 - 1985 period. It is, however, true that additional manpower and dollars need to be dedicated to the future timber sales program in order to meet quality standards while maintaining quantity of timber sales. Elimination of the cabin construction program would add less than 0.1% to the timber sale program.

It needs to be emphasized that this cabin construction program would not be possible without the volunteer efforts of the Alaska Sports and Wildlife Club. These generous citizens contribute volunteer labor to construct cabins for use by all of the public. The Forest Service contributes materials (already on hand) plus tools, transportation and supervision.

2. University of Alaska

Recommends a woodshed be built for each cabin and an office established in Fairbanks for the purpose of reserving cabins by Fairbanks residents.

A woodshed is planned to be attached to each cabin. See Section II-B and the cabin design located in the Appendix.

Information on the cabin system and where to write or call for reservations may be obtained at the U. S. Forest Service Office on the University campus at College, Alaska.

3. Southeast Alaska Mountaineering Association

Opposes the construction of recreation cabins in roadless areas. Refers to the Blue Lake cabin as an example of the public's disregard for recreation facilities of this type. Recommends tent or shelter platforms be provided in lieu of cabins and the money saved be spent on trail improvements. Also feels the cabins serve the well-to-do rather than the less fortunate who cannot afford boats or airplanes.

The recreation cabins that can be reached by foot access from Ketchikan or other centers of population have a history of heavy vandalism. However, those cabins that require boat or air travel have received little or no damage from this irresponsible segment of society. Our policy is to slowly phase out those cabins that have proved too costly to maintain in a safe and sanitary condition. The Blue Lake cabin is in an area of State Selection proposed by the Ketchikan Gateway Borough, the Forest Service will continue to maintain these cabins until the State and Borough firm up their selections and recreation programs.

Small boat users find it difficult to haul sufficient fuel and camping equipment to use in outlying areas. The mode of travel does limit use to those people with access to a boat or airtaxi fare; potential users are a significant proportion of the population as evidenced by 2000 boats for 11,000 people.

By law, the Forest Service is not allowed to spend money appropriated by Congress for a special function such as recreation for other purposes such as transportation or trails.

The remaining question is answered in Section IX-B3d.

D. Individuals

1. Dixie M. Baade

a. Objects to the Saks Cove location because it falls in the area proposed for Wilderness by the Tongass Conservation Society.

The statement text does not include Saks Cove within a Wilderness Study area. At one time, Saks Cove was considered to be in a developed area having once been logged, but the area has a good stand of young trees that most members of the public would not recognize as having been logged. Therefore, it was considered as an undeveloped area. However, the final Granite Fiords Wilderness Study Area does not include Saks Cove.

b. Suggests an educational program be started to combat the problems of garbage and trash.

Notices with cabin permits help explain the need for cleanup and the taking out of garbage by the user. Plastic sacks are also distributed to each cabin user. This concept has met with success in the cabin system. Continued efforts are needed to extend the concept of packing out trash to other users.

c. The Forest Service has not adequately considered the adverse impact of increasing the opportunity for salmon fishing on the dwindling king salmon resource of the Unuk River.

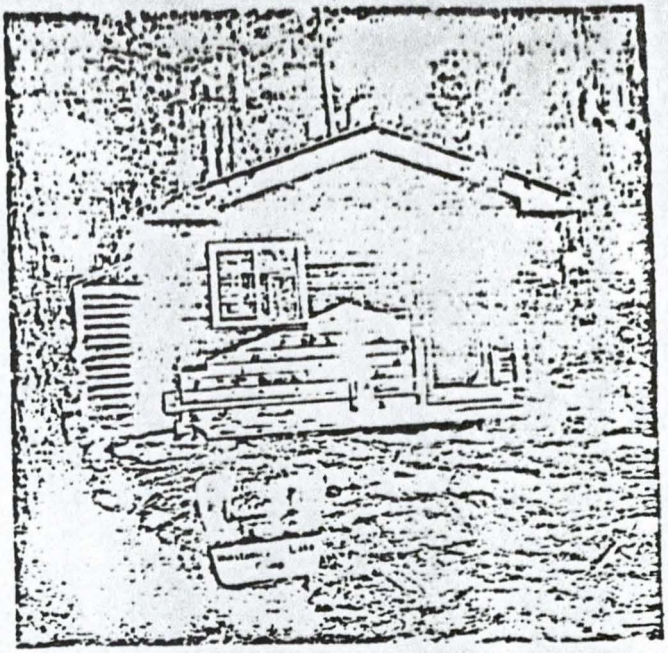
It should be noted that from Anchor Pass to Manzanita Bay, no sport fishing for salmon is allowed. In the vicinity of Bell Island, two kings are presently allowed per day with possession limited to three. We do not believe the establishment of these cabins will adversely affect the king salmon resource. Recreation users participate in many activities. While fishing is an important one, it is far from the only activity. The taking

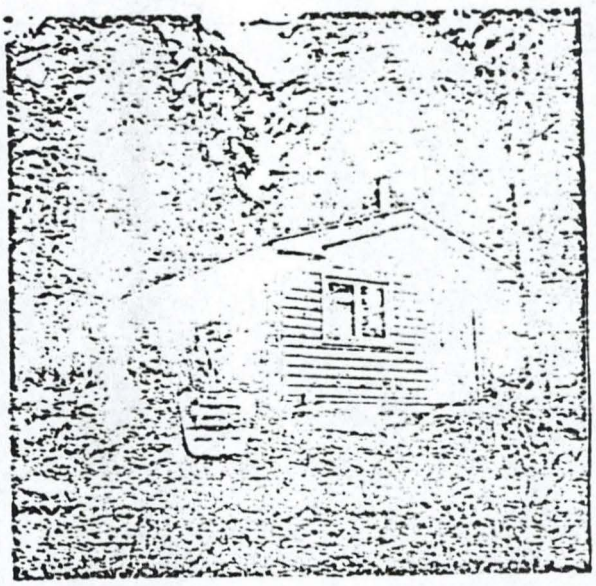
of fish and wildlife is regulated by season and bag limits. There is an increasing interest in viewing fish and wildlife that needs equal recognition.

d. The Forest Service should seriously consider oil stoves to avoid damaging the esthetic values adjacent to the cabins.

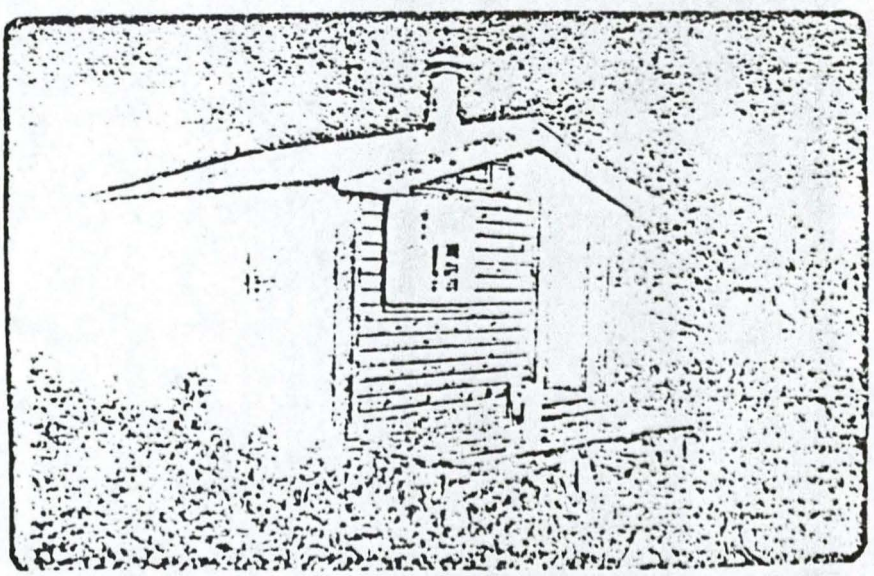
This is a distinct possibility. The trees will be selectively cut with overall appearance being the primary consideration. Should the site show signs of degradation as determined by Forest Service personnel, then oil or propane stoves will be substituted for the wood, as has been done at some existing cabins. Transporting fuel wood from other areas is also another alternative to be considered. Wood is a renewable resource, oil is not. In the present oil crisis the burning of wood rather than oil would be a saving of non-renewable resources.

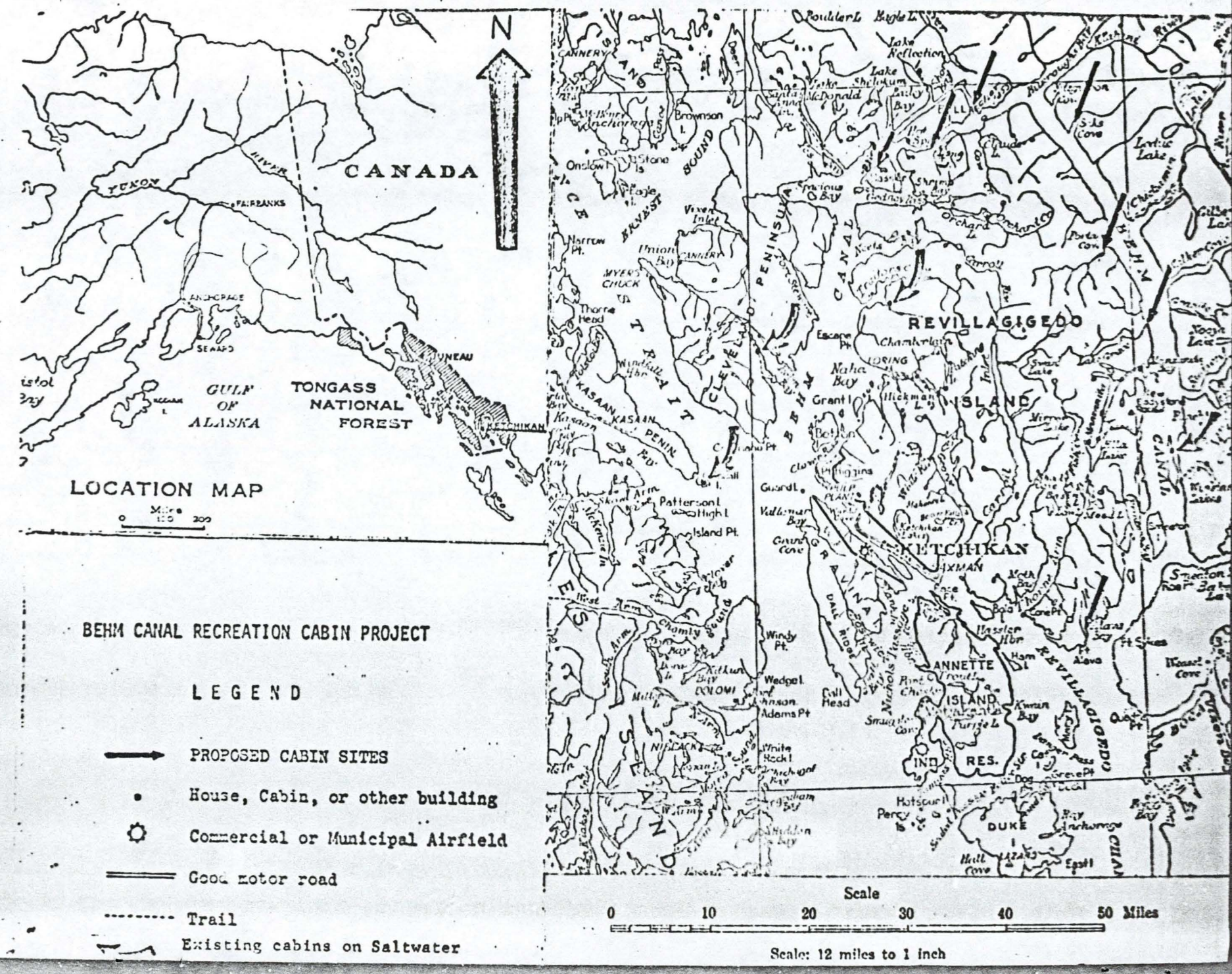
APPENDIX





These 12 x 14 foot Pan Abode cabins are similar in design to those planned for construction near the waters around Revillagigedo Island.




N
CANADA
YUKON
RIVER
FAIRBANKS
ANCHORAGE
SEWARD
JUNEAU
KETCHIKAN
GULF OF ALASKA
TONGASS NATIONAL FOREST
LOCATION MAP
Miles
100
200
BEHM CANAL RECREATION CABIN PROJECT
LEGEND
PROPOSED CABIN SITES
House, Cabin, or other building
Commercial or Municipal Airfield
Good motor road
Trail
Existing cabins on Saltwater
REVILLAGIGEDO ISLAND
KETCHIKAN
ANNETTE ISLAND
IND. RES.
DUKE I.
CANNERY
Onslow
Stone Is.
Brownson I.
Eagle Pt.
Vixen Inlet
Union Bay
MYERS CHUCK
Thorne Head
Windfall Hbr.
Kasaan Bay
KASAAN PENIN.
Patterson I.
High I.
Island Pt.
Clover Pass
West Arm
Chomly Sound
Kilkun Bay
Wedge I.
Johnson
Adams Pt.
Windy Pt.
White Rock I.
Graham Bay
Hidden Bay
Nichols Passage
Gull Head
Smuggler Cove
Hassler Hbr.
Ham I.
Fish Egg Inlet
Kwan Bay
Purple L.
Hotspur I.
Percy Is.
Hall Cove
Epsil
Bay
Anchorage
Boulder L.
Eagle L.
Lake Reflection
Lake McDonald
Lake Shelokum
Lucky Bay
Silver Cove
Arctic Lake
Gracious Bay
Orchard L.
Carroll
Escape Pt.
Chamberlain
Nahe Bay
Grant I.
Hickman L.
Bell I.
Clarence Pt.
Higgins
Guard L.
Vallenar Bay
Gravina Cove
Carroll Inlet
Woodpecker Cove
Ward Cove
Tongass Narrows
Dall Ridge
Ft. Tongass
Ft. Seward
Ft. Alava
Mount Cove
Revillagigedo Channel
Behm Canal
Scale
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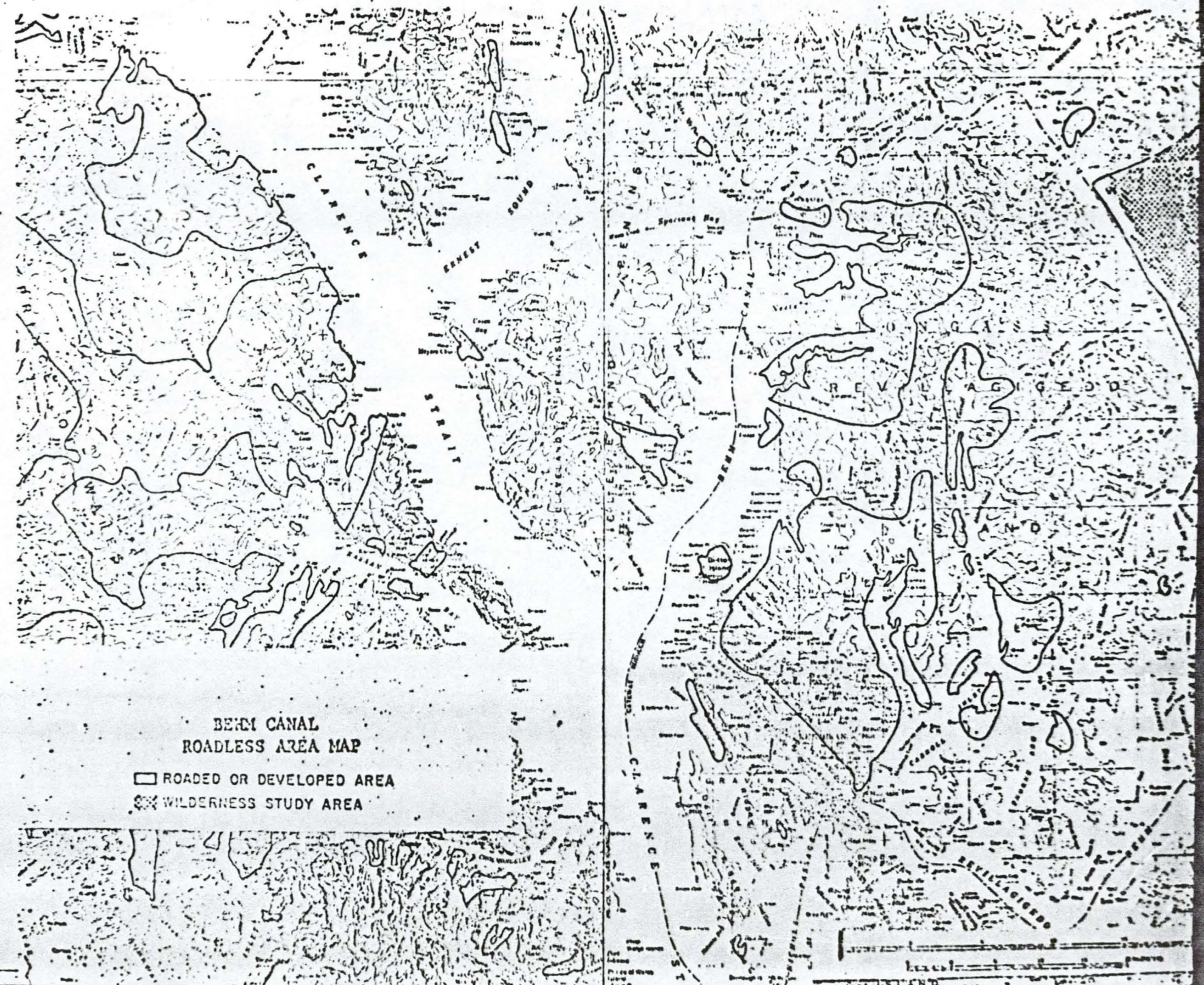
Scale: 12 miles to 1 inch


CLARENCE STRAIT
ERNEST SOUND
REVILLAGIGEDO
BEHM CANAL
ROADLESS AREA MAP
ROADED OR DEVELOPED AREA
WILDERNESS STUDY AREA